

AMERICAN AGRICULTURIST.



Agriculture is the most healthy, the most useful, and the most noble employment of man.—WASHINGTON.

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THE TRAVELLER.—No. 3.

LEAVING Wilmington, Delaware, in a southerly direction, we cross Christiana Creek, which is navigable for vessels of goodly size, some of which I noticed unloading lime here, and at the villages of Newport and Christiana, above, as within a few years the use of this great improver of the soil has become of vast importance to this state. The flats along this stream are broad, partially-reclaimed marshes, and esteemed very valuable. The face of the country, south of the creek, exhibits no rocks and hills of any magnitude, most of the land on the whole peninsula being less than 100 feet elevation above tide water, and much of it not a furlong of that. The largest part of the soil is sandy loam, originally fertile, easily cultivated, and easily worn out, which has been done in numerous instances most effectually, until some of the old proprietors, unable to live longer upon "the skinning system," have given place to men of more enlightened minds; and now it may be said with truth that no county in the United States can show a larger proportion of good farms, nor a better and more improving system of agriculture, nor a more enlightened community than New-Castle county.

Hedges.—There is probably more land fenced with hedges, principally of New-Castle thorn, in this county, than any other in the United States. If kept well trimmed, at a great expense of labor, it certainly makes a very handsome fence, and against cattle and sheep, is somewhat of a barrier. That is to say, if your stock is in a good clover field, such as abound there in great luxuriance, they will not go through the hedge unless they are a very mischievous breed. Major John Jones, a very shrewd farmer, says that "hedge is a good fence with five rails and posts upon one side, and five boards and posts, or a good ditch on the other, to keep the hogs and cattle off, until it gets grown, say five or six years, as browsing spoils the young plants. After that, you may take away the fence on the field side, if you are careful never to turn any stock into the field." To this extravagant notion of Major Jones must every impartial observer come at last; for if the thorns are neglected a few years, they grow into a row of trees absolutely worthless, as a fence, and even with most careful trimming, they die and form gaps or thin spots, through which cattle push their way whenever they desire. As a fence against swine, nobody pretends it is good for anything.

Devon Cattle.—One of the handsomest herds of this valuable breed of cattle in Delaware, or perhaps south of New York, is owned by Mr. C. P. Holcomb, whose farm is near New Castle, and is well worthy a visit from any one curious to see how much science and intelligence has the advantage over mere bodily strength in the renovation of a worn-out soil. Mr. H. retired a few years ago, on account of bad health, from the Philadelphia bar, and purchased this farm, which long years of constant cropping and shallow plowing had so impoverished, that such a herd of cattle as now fatten upon these rich

pastures, would then have starved to death. The principal source of fertility and improvement has been sought after in the soil, a few inches below where the former occupant had never looked. To this has been added lime, which has given the most luxuriant return of wheat, clover, Timothy, and Indian corn, until now, a stranger who views the crops, stock, barns, and general condition of the place, can hardly comprehend that a few years ago, it was barely able to support a few scrub cattle and feed the laborers that were striving to glean a scanty support from the old impoverished fields.

Major Holcomb gives the average of his cows during summer, at 16 quarts of milk a-day, and that averages one pound of butter. One cow averaged 22 quarts, which made two pounds of butter a-day for some weeks; but this indicates an unusual richness of milk, as well as large quantity. The common estimate of quantity of milk required upon a general average, among cows, to make a pound of butter, is 15 quarts; but I am of opinion that 18 quarts would be nearer the truth. Major H. estimates his cows to average 5 quarts a-day through the year, which will give 114 pounds of butter per annum to the cow, although that is below the average of some herds. I believe it is much above the general average of the United States.

Major H. has some working oxen so large and handsome that they might be exhibited in some places further south, as natural curiosities; and in comparison with the "piney-woods oxen," of North Carolina and some other states I could name, they would pass for a newly-discovered breed of horned elephants. He sells all his choice male calves for breeders, at moderate prices, and is thus disseminating the good qualities of this stock, and greatly benefitting his agricultural brethren, at the same time he is reaping his reward in a fair profit upon investments and liberal expenditures in improvements of stock, crops, and soil.

Major Holcomb raised 500 bushels of potatoes, upon two acres of clayey-loam soil, well manured and deep plowed; but does not consider it as an extraordinary crop, nor more than may be made upon any suitable soil, by a judicious system of cultivation. One man in the county made 500 bushels upon one acre. He dropped them in every furrow, one foot apart, and then covered the ground about a foot deep with straw.

The manner of carrying on farming, adopted by Major Holcomb, obviates a common objection of city gentlemen against engaging in the business, on account of the inconvenience of having farm laborers around the mansion house. He hires a farmer and wife, who reside at the farm house, taking charge of the dairy and providing for all the laborers, without any other trouble to the proprietor than the general superintendance, which he gives the whole business. If it should be objected that this will consume all the profits, I will undertake to prove to the contrary by an exhibit that will show a very handsome per centage gained upon the capital invested.

Neat Farming.—This may be seen in high perfection, upon the farm of Mr. Jackson, one of Major Holcomb's nearest neighbors. Hedges, too, trimmed and kept with such care as he learned in his native English home to be necessary, may be seen upon this farm, and equal to any live one that I have ever seen, unless I except the Cherokee-rose hedges of Mississippi.

The beauty of the general appearance of this delightful farming neighborhood is very much blurred in consequence of the town of New Castle owning considerable tracts of land which lie wedged in among those of individuals, and which are rented upon short leases, to those who can make the most out of them by the smallest outlay of improvement. This American system of renting land only for one or two years, at a time, is one that must ever prevent tenants from improving, if it does not actually ruin the soil.

As these town lands cannot be sold, an enlightened policy would dictate that they should be let upon long leases, with such stipulations that they would not only become the most beautiful, but most productive farms in the state.

The Prince of Peach Growers., as Major Reybold has been called, lives in this county. It is said that he and his family realised \$30,000 in one year, from their extensive orchards. Certain it is that their industry, enterprise, and improvements have added hundreds of thousands of dollars' value to the neighborhood, where they have bid the earth bring forth its fruits, whereby the tillers thereof have been enabled to build themselves luxuriant mansions, and partake of such enjoyments of life as those who cultivate the soil are justly entitled.

New-Oxfordshire Sheep.—The most extensive and most superior flock of long-wooled sheep, perhaps, in this country, is owned by Mr. Clayton B. Reybold. He has fattened some wethers to weigh 300 pounds, and has often sheared fleeces of 10 or 12 pounds of clean wool, the quality of which is not, as is generally supposed, coarse and unfit for anything but blankets and carpets. There is very little difference between Oxford, Lincolnshire, Cotswold, and other names of all the long-wooled family. The difference is in the breeding and care of flocks. This flock is well kept and bred with care and skill.

Reclaiming Salt Marsh.—The Messrs. Reybold have made some attempts to reclaim the salt marshes along the Delaware, and have met with the same difficulty everywhere experienced; that is, sinking of the soil after two or three years' cultivation, by which it is impossible to drain it without mechanical means. As this is a perfectly natural effect, the same difficulty will occur. It is owing to the decay of the mass of fibrous roots that compose the marsh soil, and which remain entire and slowly growing so long as covered with water, but which decay and compact together as soon as the water is withdrawn. Many thousand dollars have been spent in draining marshes in the United States, which the owners were compelled to abandon after getting two or three crops. Wherever the value of such lands will warrant

the use of a steam draining machine, it will be worth while to drain them. Until such time, they may be used for pasture and coarse hay, but still more profitable for the manuring of upland with the inexhaustible supply of swamp mud which they afford.

The farm of the Hon. John M. Clayton is also in this county, on the railroad from New Castle to Frenchtown, and is most delightfully situated and neatly cultivated. May he be a happy Cincinnatus upon it.

SOLON ROBINSON.

RESEARCHES ON THE SUGAR CANE.

THE following are the conclusions arrived at by Señor Casaseca, of the island of Cuba, in his researches on the sugar cane:—

First, that the white or Otaheitan cane degenerates on red and intermediate, (*mulâtres*), soils, especially if they are to a certain extent run out. This sugar cane then becomes more woody and less sweet; nothing, then, but crystalline and ribbon canes ought to be set in such soils.

Second, that a serious error has been fallen into in all the analyses of the sugar cane made up to the present time; inasmuch as being made on variable quantities of cane, without any distinction as to the part of the plant analysed, they never give the true mean saccharine richness of the individual examined, and are thus very likely to mislead the planter.

Third, that to form an exact idea of the chemical composition of the sugar cane, it must be examined throughout its whole length. From such an examination it is found, 1. That, in the canes from Otaheite, the quantity of water increases in arithmetical progression from the bottom to the top of the plant; and that, if in the other species of sugar cane this is not rigidly exact, it is so nearly so as to lead one to infer that such a mathematical distribution of the water is an organic law in the sugar cane. 2. That the quantity of sugar is greater at the bottom than in any other part of the cane. Also, that the quantity diminishes as we approach the top of the lower third part of the cane's length; but if we take the mean quantity of the central third, and also of the upper third, we find that in them the quantities of sugar are nearly equal. It follows from this that, from and after the first appearance of the central third, the distribution of the sugar is nearly uniform. 3. That in the lower two thirds of the cane, the mean quantity of ligneous matter is pretty nearly the same; the same quantity, or very nearly so, being present in each of the lower and middle thirds; but in the upper third, it diminishes rapidly, as we get nearer the top; and it is for this reason that the mean quantity of woody matter in the upper third is much less than that of the two lower. 4. That the quantity of sugar in the middle third is pretty nearly the mean quantity in the whole cane. 5. That, if it were not for the knots, there would be, in certain cases, a constant proportion between the sugar and the woody matter throughout the whole length of the cane. 6. The knots do not, as asserted by M. Peligot, contain the same quantity of water as the rest

of the cane. There is a difference of nearly 4 per cent.; but if the water increases in arithmetical progression from the bottom to the top of the cane, the same is true with regard to the joints; for there is the same difference between the quantity of water in two joints at different heights, as there is in the two corresponding internodes of the stem. 7. That, in future, to estimate the value of a sugar cane, the middle third of its length must be analysed, since the quantity of sugar in this third indicates to a great degree of accuracy the mean saccharine richness of the entire cane. 8. That, if a planter knowing how to weigh, dry, and boil the sugar cane in water, either distilled or condensed in the steam engine belonging to the mill, would attend so the above rules, he might, by means of a simple calculation, consisting of nothing but the multiplication and division of decimals, always ascertain with sufficient accuracy the mean saccharine richness of any cane brought before him.—*Comptes Rendus.*

MASSACHUSETTS FARMING.—No. 1.

As a partial compensation for the benefit I have derived from reading your instructive periodical, I will give, through its columns, a brief statement of what some of us have been doing in the old Bay State, in the way of reclaiming wet meadows, hitherto deemed almost worthless. And, by the way, I am glad to see you have not been neglectful of this subject from time to time. I was no less gratified than amused, by Mr. Robinson's late cyphering up of the *debit* and *credit* of the "Old Pond Meadow" of a neighboring state. He does not spare the task at the neglect of ignorant and slothful farmers; but the locality might with justice be altered, to suit almost every latitude and longitude of the United States. Your waggish correspondent, Sergeant Teltrue, I perceive has also "charged bagonets" manfully in behalf of the neglected swamps; and among you all, I am of opinion that ere long, they will be forced to *surrender at discretion*.

Much improvement has been effected in Massachusetts farming of late years, a considerable part of this result, being, in my opinion, attributable to the higher prices of agricultural staples, and especially fruits, vegetables, milk, butter, poultry, eggs, &c., which the large number of manufacturing establishments among us has mainly induced. Our fields are better manured; many substances formerly thrown away or totally neglected, such as the waste of tanneries, woolen and other manufactories, the offal of slaughterhouses, seaweed, peat, swamp muck, plaster, &c., have been carefully saved, composted, and applied to our crops. A more thorough cultivation has been introduced, from the use of the best turning and subsoil plows, cultivators, and other implements, which have pulverised the ground more effectually, and at a cheaper rate than formerly. The adaptation of crops to particular soils, choice varieties of seed, rotation of crops, and other improvements, the introduction of some of the best specimens of

cattle, sheep, swine, and poultry, (the last, no inconsiderable item, I assure you, when they and eggs bear the high price they usually command in our markets,) have all had their full share in the result.

There has also been great attention paid to fruits of late years; and you would be surprised to witness, on our rugged soil and adverse climate, the magnificent specimens of almost every variety of fruit indigenous to the temperate zone, or acclimatised in it, which we raise. Dense as our population is, and much as we frequently import from other states, we yet occasionally send choice apples, such as the Baldwin and russet, to Europe, the East and West Indies, South America, and other countries. We justly boast of our choice grapes, some of the finest kinds of which we raise in considerable quantities, and at a comparative trifling outlay. Many of these products may be considered as matters of luxury and of no practical value in an economical or statistical point of view, as they are consumed by the producers. But such as have money, would probably have otherwise laid it out for luxuries from abroad, while, by this means, they have distributed it among their more necessitous neighbors, mechanics, and laborers at home, and such of the farmers as are disposed to make it exclusively a money business, can, at any moment, convert their finest fruits into ready cash, by sending them to a quick market, which many of them do with great advantage to their purses.

But I find I have already written you so much, though only in a general way, that I must defer till my next, some peculiarities in our system, which was the main purpose I had in view in sitting down to write.

F. J. S.
Middlesex Co., Mass., Sept. 15th, 1850.

ADVANTAGES OF DRILLING WHEAT.—The advantages claimed for drill culture, in the Transactions of the New-York State Agricultural Society, are as follows:—

1. *A Saving of Seed.*—Five pecks of wheat drilled in is equal to two bushels sowed broadcast; every kernel is neatly covered at a uniform depth.

2. *A Saving of Labor.*—Any person that can manage a team can complete, in the neatest manner, from ten to fifteen acres per day.

3. *An Increase of Crop.*—Small ridges of earth are left between the rows of wheat, which, by the action of the frost, slides down and covers the roots, thereby preventing "winter killing." Light and heat are admitted between the rows and prevent injury by rust. A vigorous growth is given to the young plant, and its position in a constantly moist place, prevents injury from drouth.

FALL PLOWING.—All stiff, clayey lands, intended for spring crops, may be plowed this month, when the earth is neither too wet nor too dry. If plowed at the right time, and subjected to the winter frosts, the texture of the soil will be greatly improved.

POULTRY RAISING.—No. 3.

As I intimated in my last number, that a fortune may be made in the business of extensive poultry raising, I will now proceed to lay the plan before the public, as many persons are interested in this branch of domestic employment.

To keep a large number of fowls, so that they shall be equally as profitable in the ratio of numbers, as a small number, where such small number have a large range, is *impossible*. Here, at the onset, is a damper to the feelings of those engaged, or about to engage, in the business; but I cannot help it. I am going to give you what I consider to be facts in the premises, and if my assertions can be controverted, I hope that I shall not be spared. If I give not facts, let others show wherein I err, and let us have this question decided, namely, "Is it practicable to keep fowls *profitably* on a large scale? What I mean by a *large scale*, is keeping not less than 500 laying hens, to be increased to several thousands, in the same ratio of profit.

By purchasing all the food required for fowls, I have proved to my satisfaction that it is a very poor, unsafe business to embark in; but where one raises certain kinds of food expressly for them, having a small farm for that purpose, my views are very different. And here I would observe, that to think of going into this business first, by obtaining some of the numerous foreign breeds of fowls among us, that are recommended as "great layers," and then rear a stock from such breeds, is useless. Let people say what they may about this or that breed for laying, I do not believe that there is any foreign breed of fowls in existence so good for extensive breeding and laying, as some of our domestic kinds. The present great outcry about particular "highly valuable breeds," is of about the same relative importance as the great noise made some years ago about the *Morus multicaulis*, that ended in smoke. Again, the in-and-in breeding that it would require to keep any favorite breed pure, would soon produce their ruin. [Indeed! Where are your facts.—Eds.]

Now to my subject. You want about 25 acres of good land, five of which are well enclosed with a close board fence five feet high—no pickets. Every fowl must have one wing clipped. A shed should then be constructed around the entire five acres, the board fence forming the back of said shed. This shed may have a roof of boards six feet in length, and the entire line of front to be closed in with a glass window every twenty feet, at least, and a door, say every forty feet. At the back side of this shed, a single row of nest boxes should extend the whole length, so constructed that the hens will be out of sight, as the person in attendance passes along in front, opposite the boxes, and only about a foot from the ground. Perch poles should be placed the whole length, also—only one continuous perch, because in the centre of the enclosure, the building containing their food, should be placed, containing all necessary conveniences.

The great difficulty in keeping large numbers of fowls successfully, is their coming into

too close contact with each other, and especially in roosting. The healthiest fowls are those that have no shelter at night save the canopy of the heavens. Who ever saw a diseased fowl that had always lodged in the branches of trees? Now, we must obviate close proximity, and hence, I recommend the single, continuous perch. In the warm season, the sheds should be well ventilated—doors and windows kept constantly open. A rear ventilation should also be effected by grated windows, as near as every twenty feet, at least. The perch should be placed low, as the foul air, caused by respiration, is the better carried away, so that it is not received into the lungs a second time. The dung should be removed often, and lime and ashes strewn upon the ground in the sheds. The entire inside to be well whitewashed; and the outside would be better by being served in the same manner. One or two acres of this enclosure should be plowed up as often as once a-week, from April to December, to afford worms for the fowls—the balance to be in grass. The number of fowls that can be kept in such an enclosure, and all roost on the continuous perch, allowing one foot for each, is about 1,900; but fowls do not actually require over six of eight inches.

A stream of water should run through the yard, and a load of ashes, old mortar, charcoal, and gravel should be placed at convenient distances. An infirmary must be constructed at a distance, for sickly fowls, so that they may be separated in small numbers. At evening, once a-week, every fowl should be examined on the perches, and any illness may be detected by the dullness of the eye, or the lightness of the body, and any not in perfect health, to be immediately removed. Here lies a serious danger: There are many diseases that are contagious among fowls, and a few days are sufficient to spread desolation in the best poultry yards in the country.

The food of fowls must comprise Indian corn, and oats to some extent, as a daily fare; besides these grains, we may feed them on what costs the least. Potatoes are my fare, and it is only through the cheapness of this root and the ruta baga, that I am enabled to say that I am truly of the opinion that a fortune can be made in raising poultry. Aside from the foregoing kinds of food, fowls must have flesh, in some shape. If you cannot turn worms out of the earth for them, you must get the offal from the butcher. There is no use to attempt to get along without it.

It is not on every 25 acres of land that I say 2,000 fowls can be kept to advantage. It must be a soil that will usually produce from 200 to 300 bushels of potatoes per acre. In Oneida county, we do this without a pound of manure. 2,000 hens will produce annually, 150,000 eggs, worth \$1,500, taking all seasons into account. This estimate is based solely on laying eggs. The profit on chickens may be considerable, if the location be near a large city. The next point is, what will it cost to feed these fowls. To buy grain, it will cost the price of 1,000 bushels of corn, and the same of oats, say

\$1,000. But, on the potato and ruta-baga diet, (boiled and mixed with meal,) the cost may reduced to \$500, the actual cost of cultivation on rich soil. This leaves \$1,000 profit, out of which comes the losses by disease, use of land, &c. Every third year, the entire stock must be removed. But the fowls will bring, in New York, much more than the cost of raising. The feathers will be worth considerable, also. A small fortune is all that I can promise to the poultry raiser, on the above plan; yet, I believe it sure.

T. B. MINER.

Clinton, Oneida Co., N. Y., 1850.

RAISING POTATOES FROM THE BALL.

I TOOK the seed in the fall, put them in paper, and kept them in a dry place. The 1st of April, 1847, I planted the seed in fine, rich earth in a box in the house, kept them there until the 10th of June, occasionally in the open air, but not under glass, as I had not prepared the means to force them, which I think would be desirable to gain time and size. I then, June 10th, planted them in the open ground. I protected the vines the first year from frost, to obtain a longer season until the 1st of November. On digging them, I found some as large as hens' eggs, the largest portion smaller. They produced seven varieties such as I now give you:—One like the English red; two like long and round pink eyes; one like the pink eyes, but no red in the eye; one like the dark purple; one like the blue; and one like the lady finger, of large size. The second year, 1848, I planted the seed raised, like other potatoes, but in rich earth, but did not protect them in the fall to increase the growth. The vines were killed before they were entirely mature. I dug them the 20th of October, when they were the usual size of potatoes. This year, the vines were killed by the frost as early as the 2d of October, when they were green and growing vigorously, and I believe they would have been larger. They were dug the 10th of October. One weighed 1 lb. 10 oz.; twelve others, 12 lbs. 10 oz. The long potatoes are more mealy at one end than the other, which shows they have not their full growth. I do not know the kind of potato from which the seed from the ball was obtained.

The land, half an acre, was a pasture; plowed once, 1st of May, 1848; carried on eight loads manure from the cow stalls, and eight loads of leached ashes, spread them even, then dragged it well, planted corn about May 10th, had a good crop on the half acre, plowed it in the fall, about May 12th, 1849, plowed, dragged, and planted the half acre without any manure. The soil is fine sandy loam, land rolling, very mellow. The following is the expense of cultivation:—Plowing and tilling the ground, \$1.50; seed, six bushels, \$3; planting, \$1.50; hoeing, \$1.50; digging will cost about \$3; also, half a barrel of plaster, when up, \$1, making the whole expense, \$10. I am confident that the half acre will yield at least 230 bushels, which, at four shillings the bushel, is

\$115

Expense of cultivation,	10
Which leaves a balance of	\$105

I am confident I could easily sell the potatoes for the above sum, which would be the nice sum of \$210 per acre, for use of land and small capital invested.

The following particulars, I consider to be important in the cultivation of potatoes:—I plowed the land six inches deep; planted the potatoes three inches deep, leaving the hills level with the earth, and I planted the rows three feet apart, and the hills two feet from centre to centre, making 44 hills to the square rod, which gives 7,480 hills per acre. Allowing 14 hills for a bushel, (as some of mine yielded,) gives 500 bushels to the acre. I fully believe that if I had seed from the balls, sufficient to have planted an acre, and cultivated them, as I did what I planted, they would have produced at least 500 bushels this season. My land is mellow; did not plow between the rows, but hoed the weeds up, leaving the hills nearly level with the top of the ground until the potatoes grew and then raised the hills above the level. I believe the usual way of plowing deep between the rows of corn or potatoes is a bad practice, especially in dry seasons; a small cultivator is much preferable.—*N. Y. State Transactions*.

AARON KILLAM.

Mexico, Oswego Co., 1849.

ROGUEY IN GUANO—QUANTITY IMPORTED INTO GREAT BRITAIN IN 1849.—The amount of Peruvian guano imported into England during the year 1849, according to parliamentary return, was 73,567 tons. But, large as this amount is, the consumption was more than three times that quantity of *quasi guano*. The uninitiated and simple-minded may inquire "How is this?" notwithstanding there were no accumulated stocks on hand. The Gardeners' Chronicle solves this necromancy, by stating that they have the names of ten firms in London, alone, each of which, is extensively engaged in the manufacture of guano. One of these takes 30 tons of loam per week, which comes into their laboratory, simple earth, but goes out genuine guano. Such is the gullibility of the Old World. Is there any of the same kind in the New?

NEW AND ECONOMICAL MODE OF FORCING VEGETABLES.—It has been suggested by a foreign paper, that the waste steam of manufactories may be advantageously applied to the roots of plants; and without any expense for artificial heat, large quantities of tropical fruits and vegetables may be raised at all times, besides such of our own, as we can otherwise have in perfection, only during the summer months. A series of common draining tile, laid within suitable distances underneath properly-prepared beds, containing the plants, which should admit or shut off the exhausted steam by cocks, would be all that is necessary for the underground arrangements. Moisture would be thus communicated as well as heat, and a slight covering of wood, or brick, and glass, to protect the plants from frosts or cold air, would be all that is essential to securing the most prolific growth.

PREMIUM BUTTER.

Statement of Nelson Van Ness, Mayville, Chautauque, verified by certificates of Ann Van Ness, Marcus Van Ness, and Lydia Van Ness, that the rules of the society had been complied with, and 221 lbs. of butter made in 30 successive days. Mr. Van Ness certifies that their statement is correct, and that the five cows, above mentioned, were owned by him one year previous to the time of trial, and that they were the common native breed of cows, and were fed with nothing but pasture during the whole of the trial (no grain, slops, nor roots, nor corn stalks were fed).

Weighted the milk on the 11th of	
June,	185 lbs.
Weighted on the 19th of June,	205
Again, on the 25th,	190
Weighted last, the 2d July,	167

Weight for four days, 747 lbs.

The milk was set in tin pans, and set from 36 to 48 hours, till it soured, then skimmed and churned every day, the butter put into the worker, till the buttermilk was freed from the butter, then salted with one ounce of salt to the pound of butter, then put into a bowl covered so as to exclude the air from it, and set in a cool place till the next day, then put into the butter worker, and worked till sufficiently dry, then packed into the tubs, all of the time taking care to keep it from the air as much as possible. The above cows were milked three times a-day; milk weighed about eight pounds to the gallon; the latter part of the trial, the weather became hot and dry, and reduced the amount of milk and butter; salt used from the Pacific Rock-Salt Company.

John Shattuck's Statement, Norwich, Chenango County, for the best 25 lbs., made in June, \$10 awarded. Keeps twenty cows. The milk is strained in tin pans as soon as drawn, and kept on racks in the milk room, until the cream is removed, which is always done in hot weather before any whey appears, and in cool weather, before the milk begins to turn bitter.

The cream is kept as cool as possible after it is taken from the milk, and the sooner it is churned, the better. Churns every morning in warm weather, tempering the cream with ice, so as to have it gather well and hard, when it is readily freed from the buttermilk. We use, in warm weather, ice water, to rinse the butter, when it is removed from the churn, the buttermilk worked out clean, and salted with ground rock salt, (about one pound to twenty pounds of butter,) and thoroughly worked, and set in a cool place about 24 hours; and again worked, so as entirely to free it from buttermilk, and packed in firkins, and covered tight, so as to exclude the air, until the firkin is filled. No other substance used in making butter. Cows kept on common pasture. The mode of keeping butter through the season is, as soon as a firkin is filled, to spread a cloth over the butter,

and cover it with a strong brine made of ground rock salt.—*Transactions of N. Y. State Agricultural Society.*

MISSISSIPPI PLANTING.

As soon as the human race have once acquired a habit of making enough meat and bread at home, you always see land improving in fertility by better culture and manure. I contend this will follow, because I see it where there is improvement so as to secure a fair cotton crop.

But why should cotton growers not improve their seed, as well as wheat or corn growers? Do we see fewer houses rearing, fewer carriages, and less comfort, when cotton is low, say at 8 cents, than years ago when we thought 12 cents was cheap—aye too low?

I contend that I can now raise eight bales of cotton as cheap as I did six, in 1830, with less labor, and give my laborers more play time. If this be so, I can then make as much at 12 cents, as I did at 16, or as 6 to 8. I do not say that Carolina can do so. But I will guarantee it, if they will get your best plows, your steel hoes, save their seed for manure, make all the manure they can, plow deep, and improve their seed by occasional purchases from the cotton region, and by selections from the field. I have done all this. If I can do it, why should not all? There are pieces of cotton that did, in 1849, produce 40 bales from 38 acres. David Gibson did so: whereas some did not grow, on some kind of land, 20 bales from similar quantity.

Colonel Vick, the man to whom is due more credit for his tenacity in improving seed, than any live man, grew nine bales per hand, in 1849, while many would brag on six bales. Even I, myself, can bring evidence from a very high source, that a part of my cotton had every appearance of growing on a part, 2,000 lbs. per acre, (once under bad culture,) and probably not two acres in the whole country, under garden culture, exceeded it. My friend Griffith, in this county, did grow, in '48 and '49, (all improved seed,) at the rate of 40 bales from about 35 acres—excellent culture. He grew more than he planted for.

Now I appeal to cotton growers. Think me interested or not. Are these statements not worth your candid examination?

M. W. PHILIPS.

Edward's Depôt, Miss., Feb., 1850.

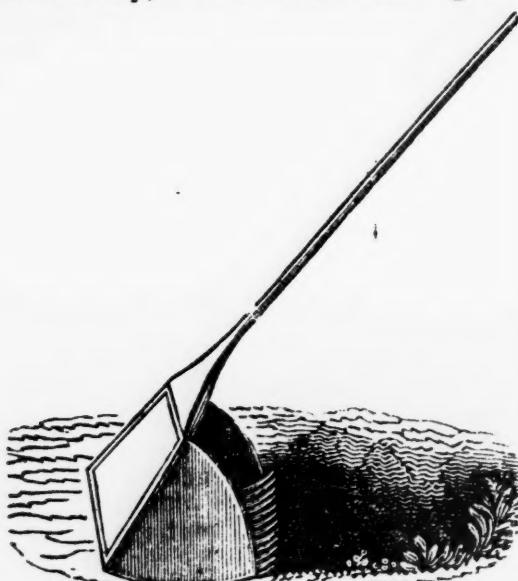
STORING SWEET POTATOES.

In the latter part of this month, or early in November, prepare for preserving sweet potatoes for winter and spring. Select a dry spot, level the ground, and lay down a bed of straw, so as to form a circle about six feet in diameter. On this straw, pile up the potatoes until they form a cone four or five feet high, over which spread a little dry grass or straw. Cover the entire cone with corn stalks, set up endwise, with the butts resting on the ground, and the tops reaching over the apex of the heap, sufficiently thick to conceal the potatoes. Then cover the whole pile with earth, at least a foot

thick, without leaving any air hole at the top, as is frequently the case. A temporary shelter should then be made over the cone, so as to prevent the rains from washing off the earth. This may be done by setting in the ground near the base of the pile, four forked stakes, on which rails or small poles may be placed, to support a covering of bark, rough boards, or thatch. Potatoes can be preserved in this manner until June, nearly as fresh as when new.

CRANBERRY RAKE.

THIS is an excellent article for gathering cranberries, and saves the labor of many persons. After raking, the berries are spread until the chaff is dry, and then winnowed as grain.



CRANBERRY RAKE.—FIG. 78.

HARVESTING AND STORING ROOT CROPS.

CARROTS, sugar beets, and mangold wurtzel should be well secured before the occurrence of heavy frosts. They should be perfectly matured, before they are pulled, which may be known by the yellowish color of some of their leaves. If allowed to remain unharvested beyond that time, a new elaboration of the juices takes place, and much of the saccharine principle, which is the fattening one, is destroyed.

Turnips and parsnips may be left in the ground until there is danger of freezing, and the latter, if not wanted for winter use, are all the better for remaining unpulled until spring. In this case, all the water must be carefully led away from the beds, otherwise, they might rot.

Potatoes, for winter keeping, should never be dug before they are ripe, which may generally be known by the decaying of the vines.

All kinds of culinary roots, after digging, should be protected from the sun, by throwing over them some leaves or straw, and as soon as the dirt attached to them becomes dry, let them be carried, at once, to the cellar or pit, where they are to be stored. They should be kept from the air by putting them in barrels or bins, loosely covered with straw; and it would be still better for them to sift in between the in-

terstices some fine, dry sand, or powdered, air-slacked lime. Such as are stored in the fields may be put in pits, where the ground is sandy and dry; or they may be piled up in conical or long heaps above the surface, at any height required. A coating of straw should first be laid over them, in the manner of thatching the roofs of buildings, in order to shed off the rain. In parts of the country subject to heavy frosts or snows, the heaps should be covered with a layer of earth, sufficiently thick to prevent the roots from freezing; but care must be observed not to expose them, if possible, to a temperature above 38° or 40° F., as they then would be liable to heat, grow corky, and probably rot. The earthy covering for winter need not generally be completed until quite late in the season; as, by leaving the straw partially bare, the escape of moisture and heat from the roots will thereby be facilitated, which is all-important, immediately after they are thus stored. When finally covered over for the winter, a hole should be left at the top of the heap, or several, if the pile be long, in each of which a whisp of straw should be placed, for the escape of moisture and gas. If the ground be stiff and clayey, the heap should be surrounded by a ditch, at least a foot deep, so as to carry off all water that might accumulate from rain or melting snow; otherwise the lowermost portions of the heaps would become wet and spoil.

IMPROVED HARROWS.

Or all the implements used by farmers, I think the harrow has been the most improved. Memory carries me back, when the only one used by me was made from the crotch of a tree, with twelve or fifteen clumsy, wooden teeth; and as cheap as the improved harrow is, with an iron clevis and steel-pointed teeth, many of the farmers in this section of this state, use no others than those with wooden teeth.

Now, if a wooden-toothed harrow can do as good work, and pulverise the ground as well as an iron-toothed one, and last as long, then it is just as well, and a great deal better; for the wooden harrow is the cheapest. But we have yet to learn that such is the fact. The common crotch harrow, it is true, if it had a suitable number of iron teeth, will generally do very good work. Harrows of this sort, however, are very clumsy, and require two men to load one on a cart.

The square-hinged harrow, with thirty iron teeth, is much neater, more easily handled, and at the same time, does very good work. But the best implement I have ever seen and used is Geddes' patent, triangular, folding harrow, with its thirty iron teeth, which runs through the ground much more freely, and is less liable to clog than the square kind. While, at the same time, a boy can put it together, or take it apart, leaving the implement in two parts, which can easily be loaded on a cart by a single man. It makes good work, pulverising the ground well, and for harrowing in seed, it has no superior.

L. DURAND.

Derby, Ct., Feb., 1850.

PROFESSOR SIMONDS' LECTURE ON THE DISEASES, &c., OF THE LIVER.

The following lecture on the "Structure, Functions, and Diseases of the Liver in Domesticated Animals," as lately delivered before the Royal Agricultural Society of England, by professor Simonds, is well worthy of perusal by the farmers of this country, as his explanations of facts observed in common farm practice suggests a remedy for diseases heretofore thought incurable:—

The liver is one of the most important of the internal organs, as it separates injurious matter from the blood. Food entering into the stomach is digested; it then passes into the intestinal canal, where it is mixed with the bile and pancreatic juice; and it is by the combined action of these fluids upon the chymous mass that its change into nutriment is effected. As to the anatomy of the liver, it is one of the largest organs, and is denominated a "gland," because it separates fluid from the blood. In one important respect, however, it differs from all other glands, namely, in separating the fluid from impure or venous blood.

The liver of animals differs in size without reference to their bulk, that of herbivorous animals being generally the smallest. The human frame has several cavities, each containing important parts of the viscera; thus the heart is in the chest—the stomach, &c., in the abdomen, which is divided from the chest by a membrane termed the diaphragm. Anatomists divide the abdomen into regions, by means of two transverse lines drawn from the inferior rib to its opposite, and from hip to hip; and also by two vertical lines. The whole arrangement may be figured thus, and the spaces are named as follows: 1, right hypochondriac region; 2, left do.; 3, epigastric; 4, umbilical; 5, right lumbar; 6, left do.; 7, hypogastric; 8, right iliac; 9, left iliac. The hypochondriac regions are so named because they lie beneath the cartilage of the ribs.

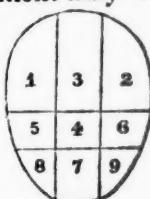


FIG. 79.

The umbilical, because it contains the navel. The epigastric, because it is above the stomach. The hypogastric, because it is under the stomach. The liver is situated in the middle one of the three great regions, termed upper, middle, and lower; sometimes stretching up into the epigastric region. It is divided into lobes. In horses, it consists of a right and left lobe, with a *lobus cistatus*, or notch-lobed, in the centre. In the ox and sheep, the notches are absent, and there are three lobes—right, left, and middle. In some animals, there is an appendage called the "gall bladder;" but the horse has none. Its absence is not confined to any particular tribe, as it is found in some of the deer tribe, and not in others. This receives secretion from the liver; but is not necessary to the life of animals, as horses, and some other species do without.

The liver being a secreting gland, and receiving much impure blood, has veins from nearly all the organs entering into it. The anterior

and posterior mesenteric veins, (from the large and small intestines,) and the splenic, pancreatic and gastric veins, (from the spleen, pancreas, and stomach,) combine to form the *vena portæ*, which conveys the blood into the middle lobe of the liver. Thus, there is a constant conveyance into this organ, of matters in the blood, which are not essential to the general well-being, but only to the heat of the animal. The *vena portæ* comports itself like an artery; that is, it splits up into a number of veins so minute as to be named capillaries, which traverse the liver in every part; and it is in these that secretion takes place. The liver is also excretory. For, in the foetal life in some animals, it receives the whole of the blood before it passes into the foetus. The veins pass through the portal canal, which is lined with cellular tissue; the veins, biliary ducts, and arteries lie in a triple form, thus: °°° with cellular tissue upon them; an arrangement which the lecturer very aptly illustrated by a reference to three drain pipes in a trench bedded down with straw. The various vessels split up into lobules, the veins and ducts being named inter-lobular, &c., according as they are within or between the lobules. So much for the anatomy.

The blood is purified by the bile which is secreted in the biliary ducts, the latter liquid exerting an influence upon the ligneous and starchy portions of the food, converting them into sugar; and this being soluble is suitable for nourishing the system. Within a few months past, experiments have been undertaken in this and other countries to ascertain what is the precise action of the pancreas and liver; and it has been found that, although the pancreas chiefly are engaged in forming sugar, yet the liver also, does the same; and thus it has been shown, in opposition to Liebig and others, that an animal is capable of generating a chemical principle, namely, sugar. The bile cells contain fat, and the liver has much sugar, from which fat is derived, there being a new light thrown upon the formation of fat in animals by this modern theory. Bile not only acts upon the food, but is also excrementitious. The coloring matter of the bile is found in the intestinal canal; and if there be too much here, the effect is diarrhoea.

Having briefly touched upon the physiology, we now come to the diseases of the liver. This organ, like all others, is liable to derangement and structural changes. Its functions are very soon deranged, especially by placing the animal in a high temperature. Hence, in tropical climates, liver diseases abound, and animals are peculiarly subject to such maladies during the summer. Now, there is one disease of the liver called *jaundice*, which depends often on functional derangement, sometimes upon structural changes, or obstruction; in fact there are three or four causes for it. This shows the necessity of consulting some individual who has made such things his study, and who is able to detect each of these causes. Whereas, to the unpractised the effects of these may appear alike. If the character of the secretions depend upon the purity of the blood, and if this again depend on

the nature of the food, then, as is the food, so will be the bile; and from the wrong quantity of food, &c., the bile may become thickened, may run together; and thus we have calculi both in the ducts and in the gall bladder. Here then comes the question, if an animal is effected in this manner, is it from gall stones or not? If so, there may be a little danger; but if the calculus be in the biliary duct, great harm will result; for in the former case, there is no obstruction to the flow of the bile; in the latter, there is. This is of more importance in the sheep than in the ox; for in the former, the pancreatic duct joins the biliary duct before entering the intestinal canal. A calculus in the biliary duct hinders the passage of that which forms nutriment; and, as when the liver secretes too much bile, it runs into the membranes, &c., of the body, the calculus sends it in the same direction.

It likewise affects the urinary secretions; but when gall stones cause jaundice, there is no diarrhoea, and the urine is not rendered brown. A practised man, therefore, would distinguish by these and other symptoms, between the different sources of the disease.

Now, as to treatment. If the cause is inflammation, get rid of the constipation in the bowels by aperient medicine, and there may be, also, an application of counter irritants to the side. A gall stone requires a different mode of treatment. We must get rid of the mechanical obstruction—we must excite the ducts to throw off more bile, so as to drive it away. These remarks lay the foundation for a few observations upon the rot in sheep. No disease has received so much attention; and it is most important to the farmer, that we should inquire into its nature. Rot depends, in a great measure, upon the quality and kind of food with which sheep are fed, some pastures being notorious for it, others, entirely free. As a broad principle, it may be stated that, when there is an excess of moisture, the food is prejudicial to the animal. This malady is not peculiar to this country, (England,) but prevails over Europe and Asia, and in Egypt after the Nile waters have subsided; showing that the cause is not in the soil, nor in the temperature, since it occurs upon any soil, and with any temperature. Perhaps there is more than one cause. Is there any particular period of the year during which it is most prevalent? We should say that it was from this time to the autumn. If a large quantity of rain were now to fall, there would be a luxuriant herbage, but that would be deficient in nutriment, and a great amount of moisture would be taken into the system of the animals which ate it. We have said that in the first stages of the disease, there is a considerable accumulation of fat. Now, sheep put on water meadows, at this season, are almost sure to have the rot; and as this directly induces fatness, sheep have been fed in this way for the market. The bile next loses its properties of supplying nutrifying matter. The blood consequently becomes impure all over the system, for the same reason that pure water is never obtained from a poisoned fountain.

We must now advert to those parasites of the liver called "flukes," which, in the gall ducts, produce the effect of a structural change. Some think that these oviparous animals are the origin of rot. The feculent matter of rotten sheep contains millions of ova of the flukes, and just as an egg will keep for any length of time, until heat is applied and the chick hatched, so these ova, while on the pastures undergo no change; but in their natural habitat, the body of the animal, they quickly develope themselves. Wheat in the same way, has been locked up in mummies for thousands of years, and then being sown produced plants. Youatt, in his work on sheep, treating of the anatomy of the fluke, describes organs which do not exist. What he calls the "eye," is a sucking disc by which the animal adheres to the liver. Flukes are bisexual or hermaphrodite. They have another disc at one extremity of the body, by some supposed a mouth; but if not, their nutriment, (namely, bile,) must be imbibed by the whole surface of the body. When placed dead in warm water, they will swell very much, which seems to indicate a considerable absorbing power. In conclusion, as to the principles that should guide us in the treatment of rotting sheep. Two years ago, seven or eight sheep, each showing the rot in its advanced stages, were put in a shed and supplied with dry and nutritious food; two were cured, the liver being still affected, but so little that they might have lived for years. Rot is a disease analogous to dropsy. It arises from impure blood, that blood being rendered nutritious by the water it contains, and the water penetrates into the cellular tissue between the jaws, &c. This has led writers into "sections" of this disease; but, "water rot" and "fluke rot" are only less or more advanced stages of one disease. If flukes exist, we must strike at the root, get rid of the animalcules, which do, by bringing about a healthy condition of the animal, since no medicine acts directly upon the flukes.

Many persons advocate the use of salt, it being a stimulant to the digestive organs. Some people keep it in troughs for their sheep to help themselves to; and it is certainly an excellent preventive. We know that it matters not how moist salt marshes are, for rot will not attack flocks there. But can we not do better? Salt has an injurious effect upon the stomach. We should throw tonics into the system. Mineral tonics are best, and sulphate of iron gives the greatest tone. We have said that the kidneys now do what the liver ought to have done, and we should therefore stimulate them to greater action. We do not mean to recommend the exhibition of ordinary diuretic agents, because they produce debility; but the spirit of nitric ether, which is a good medicine. We ought, then, to husband the animal's powers by placing him in a proper situation, dry, &c., supply him with nutritious, and dry food; we should mix it with salt, and administer small quantities of sulphate of iron, and nitric ether. We have no doubt that the farmer, by attention to these points, would often have to rejoice that he had not sent his sheep to the knacker, instead of the butcher.

SKETCHES OF CANADA.

On the 13th of August, I left Buffalo for a flying visit into that *terra incognita* to many of your readers, now known as "Canada West," a designation that, like many other improvements, does not improve greatly upon the ancient and well-known name of Upper Canada. But we won't quarrel about names until after "annexation," and then we will call it "the State of Ontario."

In leaving Buffalo, we take the cars for Niagara Falls, twenty-two miles over a cold, flat, clay soil, originally, and still, in part, covered mostly with oak, beech, and maple, and other kindred timber, and little of it cultivated in a manner to begin to show its capability of producing small grains and grass. I noticed farmers along the road busy cutting oats; and occasional spots were white and fragrant with the bloom of buckwheat. Corn, to one from a southern corn region, looked very diminutive, though of a rank-green hue, and now just in blossom. Orchards few, trees scrubby, fruit small, as a general thing. The railroad and cars upon this route are good; fare, 75 cents, time, $1\frac{1}{2}$ hours.

The Falls Village is a place capable of affording a great and cheap water power; and if half the energy were displayed in turning it to some account, that is devoted to plucking the gulls that annually flock there, it would soon become a great manufacturing town, furnishing employment to thousands of laborers, and adding value to all the farming land in the vicinity.

From the Buffalo road, passengers for Lewiston and Canada step into the cars of the Lockport road, which stand ready in the open street, where all are disembarked, instead of a commodious dépôt under shelter, as is the fashion in some Christian countries. The road now runs just along the very edge of the frightful precipitous bank, and the boiling flood that rolls between the perpendicular walls of that immense chasm below the Falls. We begin to bear off from the stream at the Suspension Bridge, a structure that looks like a frail ribbon stretched from bank to bank, but yet is capable of carrying over heavy teams, elevated more than two hundred feet above the river, which seems here to be struggling to force its way through a gorge too narrow to admit the mass of water that pours down the great fall, three miles above. At the Junction, three and a half miles from Lewiston, we exchange from the wretched cars of the Lockport road, to others not much worse, drawn by horses down the long hill, to the steamboat landing on the Niagara. A most charming agricultural scene opens to view, while descending this hill. The farms upon the great Lewiston plain of alluvial lands, are spread out as it were, like a picture at our feet. Good farm houses, barns, orchards, stubble, and oat fields of golden hue, contrasting with the dark green of maize and grass, and all interspersed with groves of forest trees, and flanked by the village and river, and opposite shore, and town, and heights of Queenston, form a whole that is delightful, and never fails to gratify the eye of

every traveller who has a taste for rural scenes.

The time required to make this trip upon these railroads from Buffalo, is upwards of three hours—a little over ten miles an hour—which is rather slow railroad travelling, but decidedly better than staging over the same route thirty years ago.

The steamboat for Hamilton, left the Lewiston wharf at one, crossed over and touched at Queenston, and then down the river, stopping at Youngstown, on the Yankee side, and Niagara opposite, where the decaying wharves and warehouses bear witness that the spirit of enterprise and improvement, which animates the people of one side of this river, does not, for some unknown cause, affect the other side in the same way.

Directly after leaving these towns, we pass between the British and American monuments of wickedness and folly that disfigure the mouth of this beautiful river, bearing bristling cannon pointed at each other, where nothing but emblems of peace and productiveness of a rich soil and healthy clime should, of right, ever be seen to divide brethren from the same hearth stone, into two belligerent nations. A few miles after entering Lake Ontario, and turning north along the west shore, we run along side of the piers of the mouth of the Welland Canal, a work of monumental form to the mind that can conceive the project of lifting fleets out of Lake Ontario and sending them over the mountains, into the upper lakes, and in return loading them with the produce of western farms, and sending them direct to Europe.

The farmer, while tilling his crops in Wisconsin or Illinois, thinks but little that this canal exerts a direct influence in his favor, and tends to enhance the value of every bushel of grain he produces for sale. Yet, such is the fact, and such will ever be the fact with every canal, and railroad, plank road, or improved facility of getting produce from the place of growth, toward the place of consumption. Yet farmers, almost everywhere, are reluctant or dilatory to lend assistance towards any such improvement, or even to keep neighborhood or market town roads in decent repair.

We were about five hours making this forty-mile trip from Lewiston to Hamilton, against a head wind and a very sickish sea. The town lies a mile back from the shore at the head of Burlington Bay, which is entered by a short canal through the neck of land that divides it from the lake. It is said to contain 10,000 inhabitants, has some broad, handsome streets, and substantial stone and brick buildings, and like all new towns, shows some marks of its early Jonah-gourd-like growth. It is located upon a handsome inclined plane, which extends from the water to the base of the mountain range that skirts the lake a mile or two from the shore, which renders many of the farms, though picturesque in appearance, very much broken. I understand a narrow strip of these farms produce peaches, while others totally fail. The land between the mountain and shore appears to be a sandy loam—that upon the

sides and on the table land, which spreads out into a broad extent on top of the mountain, is a stiff, brown clay, and one of the best soils for wheat in North America. Owing to continued indisposition, while I remained at Hamilton, I was unable to visit many of the neighboring farms.

The agricultural capabilities of the district around Hamilton, and on westward towards London and upon Grand River, are probably equal to any tract of the same extent upon this continent; and I believe there are some very good farmers; but there is, upon the whole, a very great lack of that enterprising spirit which alone can bring a rich soil into a high state of culture and productiveness.

On Thursday afternoon, August 15th, I left Hamilton, and reached Toronto in four hours, run close along the north shore of the lake, where a good many flourishing farms are to be seen, if we may judge by what I have always considered a good sign, that is, good barns.

Toronto is also situated up a bay, though not back from the shore like Hamilton. One of the most prominent objects in approaching this city is the Lunatic Asylum, and next the extensive, commons lying waste in front of it, though not quite so worthless to the world as the barracks and their occupants, also seen in the same view. What a number of persons might support themselves by cultivating this tract of rich, alluvial land now lying idle, or only serving to show off the trappings of the few swords not yet made into pruning hooks and plow shares. I was disappointed in finding Toronto so much more of a lively, thriving business place than I expected. The population is about 27,000, which, I presume, includes somewhat extensive suburbs. One of the best farming regions of the province lies contiguous, and gives trade and wealth to this city.

By the politeness of Mr McDougal, editor and proprietor of the Canadian Agriculturist and the North American, I had an opportunity of viewing the farms some ten miles out "Yonge street." This name is given the continuation of the principal street leading north, in the direction of Lake Simcoe, which is about 37 miles distant. It has been graded and Macadamised upon a straight line, without regard to any obstacles, as creeks or ravines that might intervene, and like a great many similar foolish efforts to make a road straight, going through and over hills, instead of going round them, it has caused a great outlay of money in places where a slight bend would have saved the largest portion. It is a government work, and is kept in repair by tolls. The farms are laid out one fourth of a mile wide and one and a fourth deep; then comes another road, and so on. These strips are called "concessions," and are numbered according to situation. Cross roads, also, run a mile and a fourth apart; so the whole country is divided into squares of a mile and a quarter. This is an old French fashion, adopted, at first, along the streams for the purpose of giving a greater number of frontings upon the water. In the interior, it certainly is not so perfect a system as the

United States have, of mile-square sections and square subdivisions, all numbered by a systematic rule.

Leaving Toronto, we ascend very gradually from the lake, a couple of miles, and then up a low ridge corresponding with the curve of the shore, composed of sand, gravel, and clay, like the present beach. All the soil below the ridge is more spongy than above, though much more sandy. The upper level is a rich clay loam, without hills, though broken by ravines. Portions of it were covered with white pine, and other parts, with hard wood. This was made up of maple, beech, elm, ash, hickory, basswood, butternut, and some other sorts; oaks not being plenty. Farms of 200 acres, with a good comfortable brick house and out buildings, and good barn, and well fenced, and under fair cultivation, averaging 25 bushels of wheat, and 35 or 40 bushels of oats, and 200 of potatoes, will sell for about \$50 an acre, along this road, within ten to twenty miles of the city. Corn is only grown for home consumption, and does not probably average much more to the acre, than wheat. The soil here is excellent for grass, but the winters occupy half the year, and are sometimes very severe. I did not see so many cattle as I expected, though I did see a few herds of good-looking cows, and some small flocks of fine sheep. As for horses, I venture the assertion that I can count a greater proportion of good substantial, real serviceable farm horses upon this road than upon any other that I have ever travelled.

I observed here the same scarcity of good orchards, that I have elsewhere. There are a few rather tasty and somewhat ornamental places, but the great portion of them show the owners to be very plain, and probably, comfortable-living farmers, that have not yet heard of "agricultural chemistry," nor "scientific agriculture." Almost all we see, reminds us of Auld-Lang-Syne in farming, such as we were wont to look upon forty years ago, when the old Cary plow used to kick our shins, in Connecticut. The plow in most common use here, is the "Canada Scotch Plow;" and any argument endeavoring to convince these people that there is a better kind, or even any kind at all, equal to this, is argument thrown away. There are a good many other improvements in agricultural implements and machinery, that are as a sealed book to the Canadian farmers generally, and I fear will continue to be so, during the age of the present non-reading generation.

A gentleman by the name of Hurlburt, of Toronto, has spent a good deal of labor upon a machine to go by steam, to supersede the plow in some cases, and thinks he has now got it so it will work advantageously. The principle is more like spading than plowing. I hope with all my heart, he may be quite successful. There are many more things I might have seen in this part of Canada, and much more that I did see, that I might write about; but as I am only out for a "flight," I must plume my wings and away. So let us step on board the Princess Royal steamer, a very good boat, of the slow and

sure line, for Kingston, 180 miles northeastward.

The north shore of Ontario, below Toronto, appears dotted along with small farms, upon which that sign of prosperous condition, a good barn, is often conspicuous. The first town of any note is Port Hope, which is really a very hopeful looking place, occupying a smooth valley that opens up through the hills with a gradual slope from the water. It has an excellent wharf and good-looking buildings, and with one exception, I must commend the place. "Port Hope whiskey" has long been the most noted and abundant article of export from this town, and I fear that some of the bricks of its nice looking edifices are cemented with the tears of widows and orphans of those made drunk upon its wicked abominations. A neat church was seen peeping out of the trees upon one of the hills, and at the foot of another, upon a grassy, shady plot, on the bank of the lake, some dozens of boys and girls were making the earth glad with joy, while the setting sun gilded the trees over their heads, dancing to the merry notes of a poor old blind fiddler, and as we left the wharf, carrying away one of their companions, they made the earth resound with such cheerful notes as only are heard in those spots where dwells rural simplicity.

A few miles further on, and we pass Coburg, another thrifty-looking town, containing about 3,000 inhabitants and a costly artificial harbor. Many of the Canada towns seem to have a pride in one conspicuous public building. Coburg is in the enjoyment of this feeling, in a very splendid stone edifice. I regretted after it was too late, that I had not made arrangements to visit these two towns, and if I had known their importance, would have done so.

From here to Kingston, the passage was by night, but I was told the coast possessed no great attractions. I arrived in this ancient military-looking strong hold, on Sunday morning, August 18th, the weather perfectly clear, but cold enough to make a fire agreeable, if I could get it; but as that is not convenient, let us ramble out in the sunshine, and warm up a few ideas for my next letter. *SOLON ROBINSON.*

Kingston, Canada, August 19th, 1850.

RECLAIMING WET LANDS.

THE situation of my lands that I have drained was formerly springy and cold, and so moist, most of the year, that it could not be plowed, except after a long season of dry weather. The grass which grew upon it was poor, and of very little use either for pasture or meadow.

I have drained on different kinds of soil, and in all cases with good success. In some instances, at the bottom of the ditches, was marl, others gravel, and some clay, and the surface an intermixture, from the salt ridges in some instances.

I have tried both open and covered drains, but have been most successful with the covered ones. I commenced by plowing deep in the driest part of the year, generally in the latter part of August. I can ascertain where the

springy places are, and can better decide how to arrange my ditches. I place the ditches so as to touch all the portions of the soil that are most moist, in order to drain it as complete as practicable. [Mr. Gates makes his ditches of loose stones on his farm, and covers with flat stone, or slabs, when stones are not to be had. His ditches are generally from eighteen to twenty inches deep, and about fifteen inches wide. He has ditches covered with slabs which have been made eleven years, and are still in good preservation.]

As to the expense, it is but a trifle more than to finish properly, a good open ditch with sloping sides. The objections to these latter ditches are, that they so readily fill up and occasion much waste of land. The results of ditching, have, I think, increased my land at least three times its former value. I have raised on this land so reclaimed, the season after the ditching was completed, the largest crops on my farm, of corn, potatoes, barley, and spring wheat. Some of it is now in meadow, which yields the first quality of Timothy grass, where, previous to its being drained, it was scarcely worth mowing and gathering, and the quality was inferior.—*N. Y. State Transactions.*

DANIEL GATES.

Sullivan, Madison County.

IRRIGATION.—No. 4.

Quality and Preparation of the Soil.—The best soil for a water meadow is a good gravel, though the richest herbage is sometimes found where there is scarcely any soil at all; as, on the meadows on the river Avon, in Wiltshire, England, which consist of beds of shingle and pebble stones, matted together by the roots of the grass. From good authority, it seems essential to the formation of a good water meadow, that the bottom be porous and free from stagnant water. Hence, under-draining is often indispensable before a meadow can be established; and a marsh or peat bog, if drained and consolidated, may have water carried over its surface, and produce very good herbage.

If the soil is a very stiff clay, draining is indispensable where a water meadow is to be made. It is found, also, that the more porous the soil, the less depth of water is required, which may not be obvious at first; but clayey soils let the water run over the surface without soaking into the roots, whereas, the porous soil is soon soaked to a considerable depth. The water, therefore, must be longer on the clay than on sand or gravel, to produce the same effect. If the water is properly applied, however, almost all kinds of soils may be converted into fertile meadows. On very stiff clays, a coat of sand or gravel, where it can easily be obtained, will greatly improve the herbage. The gravel should not be plowed in, but spread on the surface, two or three inches thick. Soils, also, containing clay in an unburnt state, on account of their aluminous salts, have the property of fixing the ammonia contained in the water, an important fact to be observed in regard to the distance it has to flow before suffered to waste.

AMERICAN WINE FROM THE EUROPEAN GRAPE.

I BEG to submit the following statement of my management of viney, &c. The viney is located at Syracuse, near the Fair grounds; it is on a hillside, with a southern exposure. The soil loamy on the surface, with a subsoil of red clay, which loosens by exposure to the air. The ground was covered with stumps and brushwood when I entered upon it, six years ago. I hoed it over thoroughly, so as to entirely reverse the soil to the depth of about two feet, using the roots and stones as a fence. I manured it over in the second and third years. The grape roots were all imported from Baden-Baden, 20,000 in number; 15,000 of them I planted out, digging the holes about four feet apart, about eighteen inches deep, and setting in the roots aslant, about six inches towards the south, so that the top laid upon the ground towards the north, but not enough to expose any part of the plant. I arranged it so as to have the plant settle from sight, and mark the spot with a stick. The other 5,000 plants I reserved to supply failures of those planted out. Over 4,000 of them failed, in consequence of shipment from Europe, too late in the season; but this difficulty, I have obviated by successful operations with slips.

I have cut slips four or five feet long, and prepared a trench about eighteen inches deep, and laid in the slip bending it up even with the surface, and marking the spot with a stick. Plants raised from slips, so prepared, have borne grapes the second year, in some cases, and always in the third year by cutting back so as to leave the first year two buds, and the second year four. Very short plants, I allow six buds. In the fourth year, twelve buds, and in the fifth year, as many as thirty buds may be left. The ground should be worked every spring, about six inches deep. For raising grapes, the plants should be eight feet apart, and this would allow a plow to pass, and be cheaper than hoeing. Any vegetable may be raised between them that does not grow high enough to obstruct the sun. The refuse from vegetables, well rotted with cow dung, is the best manure. Horse or hog manure is injurious, as it creates a kind of excrescence to grow upon the stems, and otherwise hinders the growth, and indeed, often destroys the plant. In the spring, after flowering time, some of the underneath foliage should be removed to allow a free passage of air to the berry; otherwise they do not develop themselves fully, and many shrivel up and are lost.

Mildew is the only foe I have encountered, and this may be conquered by arranging the land so as to prevent dust from settling on the grape, which is the cause of mildew, as it holds the moisture of dews or rain about the grape, which would not be the case if the grapes were clean. Hoeing should therefore be avoided during the summer, as it loosens the earth and raises dust.

The grapes should not lay on the ground, neither should they be raised more than four feet above it. Trimming should be done every season, in March; late trimming, (in the Euro-

pean grape,) causes bleeding, and consequent loss of thrift.

Making Wine.—The grapes must be gathered when fully ripe at the end of October, or beginning of November—the frost will never hurt the ripe grape—throw the grapes into a large tub, and pound them so as to break the grape; let it stand three days for red wine, (for white wine from black or blue grapes must not stand,) then press the liquor from the seeds and skins in a common press, keeping out the skins and seeds; put it into a hogshead filled within three inches, and make around the bung hole, at about an inch and a half from it, a rim of clay four inches high, into which fermentation will throw the impurities; let it stand a week, and then remove the clay and place over the bung hole a sand-bag valve for a few days, until the fermentation subsides, after which, bung it up, leaving a small vent by means of a goose quill near the bung; after two or three days, close it tight and let it stand until February, and on a clear day, rack off in small barrels; these barrels will require to be kept in a cool cellar, and filled up once a month, the volume being constantly diminishing, and the vacant space would cause the whole to sour. All the vessels used should be very clean, and no metal should be brought in contact with the wine in any part of its manufacture.

The following are the grapes cultivated by me:—

Black.—Burgundy, Silvaner, Black Cluster, Champagne.

Red.—Feldliner, Muscat, Malvader, Factor, Rolander.

Blue.—Factor, Hungarian.

White.—Netherlander, White Cluster, Elsesser, and many others.—

Syracuse, September 12th, 1849. B. POPPE.

B. Poppe, of Syracuse, exhibited a specimen of new grape juice, or *must*, for wine, which he calls a champagne; the one made from a mature white grape, and the other from a ripe grape of a dark color. The latter was thought to promise well. We understand the maker is a German, and is attempting to apply German vine-dressing and vintage to the soil and climate of the centre of our state. May he have abundant success. The manner of culture by Mr. Poppe, is annexed to this report as per above.—N. Y. State Transactions.

POULTRY.

It has been rather a current historical opinion, that the citizens of Boston have been *game* since about 1630, when old Governor Winthrop first took possession of Tri-mount, and drove off the blood-thirsty salvages, the Pequots and Narragansets, who infested the numerous strong holds of that, and the neighboring regions. But whatever may have been their character in the olden time, it is quite certain, if not *game* before, they are being converted into *game* now, quite rapidly.

As an illustration, we give a few items from rather a *cute* Quaker poultry fancier, away down

in the *Jarseys*. He had been taken in some years ago, by a Yankee clockmaker, who had sold him a machine, that *did'nt quite come up* to the recommendations of *Mr. Slick*. When the poultry fever broke out in Boston, last fall, he was determined on revenge against the Yankee nation, and luckily for him, he had all the weapons of war, catapults, battering rams, and what not, to accomplish his design. So down to "Bosting" he started, with about 500 head—we might better have said 1,000 *wings* of poultry. His geese weighed 23 pounds a-piece, while Colonel Jacque's—the brag game cock of the old Bay State—weighed but 19 pounds 2 ounces; turkeys weighed 26 pounds; Dominiques 9 pounds; Jersey blues 10 pounds; Shanghaes 12 pounds, while the capons kicked the beam at 30 pounds the pair! the latter, perhaps, being bought especially for continuing the breed! All were turned into gold at \$5 to \$7 and \$8 per pair, for fowls, \$10 for turkeys, while the geese were deemed very cheap at \$20, the price being probably raised from the undue excitement among the *ganders*.

The result was so satisfactory to our Jersey friend, having got full indemnity for his wooden pumpkin seeds, that he intends being on 'hand with "a few more of the same sort" at the next poultry fair in the metropolis of universal Yankeedom. With the epic bard we ejaculate,

When Gilpin next doth ride abroad,
May we be there to see.

PREPARING BONES FOR MANURE—DISSOLVING THEM IN SULPHURIC ACID.

By breaking up the solid and tenacious structure of bones before applying them to the soil, their materials are much more readily appropriated by plants. If applied in the condition in which they are found in the animal, years would elapse before they would thoroughly dissolve and mix their elements with their kindred dust. By the mechanical operations of breaking, crushing, grinding, or sawing; or the chemical change effected by dissolving in sulphuric acid, or by steaming, burning, or fermentation, they are ready, at once, to yield their nutritive properties to the crops.

In this country, bones are generally ground before using as manure. Immense quantities are furnished by the manufacturers of buttons, and other products of bones, and this is so finely divided by sawing and other manipulations, as to need no further preparation. But in Europe, much of the bone is prepared for agricultural purposes by dissolving in sulphuric acid. This is done by mixing two or three parts of water with one of acid. If the bones have been previously crushed, one third their weight of acid will dissolve them; if they have not been previously broken up, then half the quantity may be required. The sulphuric acid is worth, usually, in this market, about two and a half cents per pound, while the bones, especially the refuse ones, in the interior, may be considered as valueless for any other purpose except manure. If there be no means for grinding, then we say, decidedly, wherever manure is desirable, (and

where is it not?) it will generally pay for dissolving the bones in the acid, if obtainable at the above price. It may, however, be a still more economical preparation to burn them, by which the earthy matters, the phosphates, &c., are all left in the residuum.

The sulphuric acid is, of itself, a fertiliser of much value, and by its application alone, will, under favorable circumstances for its application, produce good returns. We should, however, esteem it, in this country, as too expensive for general use, considering its relative value as compared with our products.

Fermentation of bones, is quite as economical as burning, and by this process, fertilising portions, which would otherwise be expelled and driven off into the atmosphere, will be retained with the earthy matter, and remain to add to the value of the compost heap. Each of these methods we have more than once detailed in the previous columns of our paper, but the great value of bones, as fertilisers, induces us frequently to recur to it.

• • •
NEW VARIETY OF WHEAT.

We have received from one of our correspondents, the following description of a new variety of wheat he has cultivated for two or three years. We have the promise of some of this seed another season, it having all been engaged before our application reached the grower:—

I selected some stalks from my field of new wheat, the past season, that measured, in height, six feet, nine and a half inches; the blades were seven eighths of an inch wide, by actual measurement, and the heads, including beard, eleven inches long, and containing as many as 120 grains, which, in point of size, surpass anything of the wheat kind, known in this section of the country. I have never sown any of this wheat, early enough to expose it to the attack of the fly, and cannot, therefore, say positively, whether or not, it is capable of resisting successfully, the incursions of that great enemy to the wheat growers. I will say, however, that, if vigor and strength are any safeguard against the fly, it is entirely impervious to the attacks of that foe.

In regard to its power of resisting rust, I think the experience of two consecutive years, will justify me in saying that it is not at all liable to that disaster. I selected, last fall, thirteen acres, in the middle of my field, upon which I seeded my new wheat, broadcast, plowed it in, and harrowed on top the lands, to pulverise and level the same. On each side of this lot, I seeded in the same manner, and almost the same time, two other varieties of wheat, one of which, the "hardware," is a favorite bearded white wheat. The result was, that both the old varieties were injured by rust, whilst the wheat in question, entirely escaped. The season just gone by, has been one of the worst upon the wheat growers that has been known here, for many years. There was not one single kind of wheat in the whole county of St. Mary's, so far as I have been able to ascertain, that was not injured more or less by the rust, except the new wheat.

QUERIES—LIME, THE FOOD OF PLANTS.

I WISH to offer a few remarks upon some of your correspondents, who, I think, are a little careless in some of their language. I do not wish to discourage anybody from writing for your useful paper, but as I am an uneducated farmer, I desire to read articles that I can understand without too much trouble; for, as Lord Chesterfield used to say, "where the sense lies so very deep, it is generally not worth the trouble of digging up." His meaning, however, I do not intend to apply, by any means, to all the articles I may notice, as the first one, for instance, is good enough in itself, namely, "To Measure the Height of Standing Trees;" but I think persons unacquainted with trigonometry, unless they had seen the operation performed, could not understand it. What does "A Traveller" mean by the "point of distance," where no distance is given?

The next article, "Gunpowder for Choked Cattle," looks something like punning. Query. Would it not be as well to "use the fire" with the first charge? [Yes.—Eds.]

"To Destroy Weeds in Walks." Would not the boiling water answer without the chloride of sodium? It might take a little more of it.

I observe, also, (and the observation is not intended to apply to any one writer,) that you hold the doctrine, in your paper, that lime is not a direct food for plants. Now, I am not going to dispute this, for I am no chemist, and I do not know, that, as a farmer, I dissent, excepting partially, in my practice, from your conclusions; but I confess myself unable to understand your theories, when you assert that lime is not a direct food for plants. I suppose you mean the lime which we Pennsylvania and New-Jersey farmers get from Philadelphia and New York, and which I see you call carbonate of lime. If you do not, I wish to understand you. And this lime contains a considerable quantity of carbon, which, (carbon,) is the base of all straw or stalks of plants. Query. Is this evidence of direct food? I do not profess to be acquainted with chemical terms, and may misunderstand. Indeed, I am unable to understand the conclusions arrived at, in this particular; but I am anxious, when I read, to comprehend what I am reading, and would be pleased to see what appears to be a *prima-facie* contradiction explained.

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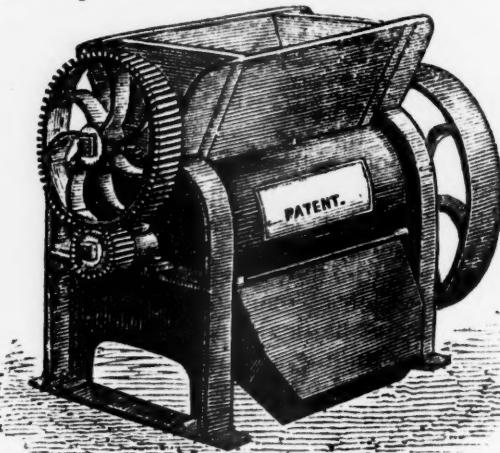
We have never meant to be understood as denying that lime is a direct food for plants. Every correct analysis shows lime to exist, in greater or less proportions, in the ash of all plants, however minute this proportion may be. What we do say, is, that the beneficial effects of lime are mainly due to its effects on soils, changing their elements from inert and intractable matters, which are perfectly unadapted to minister to the growth of crops, in their present condition.

These beneficial effects are not confined to the fixed or earthy parts of soils, but are apparent in the arrest and hoarding of the fertilising materials floating in the air, or which are brought into contact with it, by rains and dews,

or irrigating streams. It also concocts and combines with the vegetable food and manures which are brought to the soil and mixed with them, and prepares them for assimilation with the growing crops. These are the principle benefits we claim for lime, there probably being enough of it in any soil, to furnish the quantity taken up and permanently retained in the crops of a hundred, or it may be, a thousand seasons.—Eds.

IMPROVED CORN AND COB CRUSHER.

THIS machine is designed for crushing corn and cobs for feeding to stock or previous to passing through millstones for grinding into fine provender. It is also used to crack corn, alone, suitable for hommony or for the use of stables. It has the merit of compactness, durability, uniformity in its work, and economy of power. Its height, when set up for work, is about three feet. It will grind the cobs and corn to the same degree of fineness, and this it will do when the corn is damp, or even green, without clogging. It is generally moved by a four-inch belt, but it may be driven by gear, without inconvenience. This machine will crack the corn and cob much faster than one stone can grind them. It is also asserted by experienced millers, that any millstones will grind at least one fourth faster and finer when the cobs are cut up in this manner. Price \$50



CORN AND COB CRUSHER.—FIG. 77.

CUT WORMS.—These pests are most effectually destroyed at the north, by deeply plowing the fields, just as the winter is setting in. They have by this time settled into their snug winter quarters, far below the surface, and by throwing them upon or near the surface, where the pelting storms and severe frosts will catch them, when too much chilled to seek anew for a hiding place, large quantities of them will be destroyed.

Colonel Fluker, of Louisiana, says, for the cotton crop of that state, they are most effectually exterminated by plowing deep about the 1st of April, just before planting the cotton. In this way, millions have been destroyed, and his own fields have been saved from their ravages, while others around him have been greatly impaired by them.

REPUBLICATION OF PROFESSOR JOHNSTON'S LECTURES.

DEAR SIR.—I have learned with great pleasure that you propose to publish an edition of the lectures of Professor Johnston, delivered before the New-York State Agricultural Society and the Members of the Legislature of New York, the past winter, and which are published in the Transactions of the Society. They were received with great favor at the time they were delivered, and a perusal of them, since their publication, has elicited warm approbation from many distinguished men in our country, interested in the advancement of agriculture.



James F. Johnston

FIG. 78.

These Lectures show the intimate connection which exists between science and practical agriculture, and no one can peruse them without being fully sensible of the high calling of the farmer, and of the destiny which awaits him when science and education shall bring to his aid all that they can confer upon his profession.

Professor Johnston is a native, I understand, of Kilmarnock, in the east of Scotland, and was educated, it is believed, at the University of Glasgow. He pursued the study of chemistry with Berzelius, a distinguished Swedish chemist, and travelled very extensively, at an early period of his life, in the northern regions of Europe—in Sweden, Norway, Finland, and Russia—traversing the whole breadth of European Russia to the Wolga. Subsequently, he made himself familiar with the agriculture of

other portions of Europe by personal examination. At the foundation of Durham University, in England, he was appointed one of its teachers, and is now reader in chemistry and mineralogy in that distinguished institution. He was appointed Professor of the Agricultural Chemical Association, of the Highland and Agricultural Society of Scotland, in November, 1843, for five years, and during that period, his labors were productive of great good to the agricultural interests of Scotland.

Professor Johnston published his lectures on Agricultural Chemistry and Geology, in 1841, and an enlarged edition was published in 1847.

In this country, this work has passed through more than twenty editions, and it has also been republished on the continent of Europe, in French and German, and has secured the confidence of the farmers of this country, more than any work published, so far as I am informed. He has published "Contributions to Scientific Agriculture," being a summary account of the proceedings and operations of the Agricultural Chemistry Association of Scotland, during his connection with it. This is a very valuable work, and deserving of extensive circulation in this country.

Professor Johnston prepared, for schools, a Catechism on Chemistry and Geology, which has been very extensively introduced into the primary schools in England, Scotland, and Ireland, and has passed through twenty-two editions there. It has been republished in France, and it is believed, in several other countries of Europe. An edition has been published in this country, with an introduction by Professor John P. Norton, of Yale College, who pursued his studies a portion of his time, with Professor Johnston, while engaged in the Agricultural Chemical Association of Scotland. This is a work of great merit, and has been productive of the most favorable results wherever introduced.

Professor Johnston was invited by the New-York State Agricultural Society, in 1848, to visit this country, and deliver a course of lectures before the society, and such other associations as he might be enabled to address. His connection with the Chemical Association not being concluded, the invitation was then declined. In 1849, the invitation was renewed, and he appeared before an American audience, for the first time, at the Annual Fair of the Society, at Syracuse, in September. His address upon that occasion was upon the agriculture of Europe, and was listened to with great interest, by an immense auditory. In January, 1850, he delivered the course of lectures which are now presented, in separate form, before the Society and the Members of the Legislature. He subsequently delivered a course of lectures

before the Lowell Institute, Boston, also before the Smithsonian Institute, at Washington, and two lectures before the American Institute of New York. He made an agricultural examination and survey of the Province of New Brunswick, which has been published by the Provincial Legislature, and which is very highly commended by gentlemen of that province.

Professor Johnston is in the meridian of life, and of usefulness; and, should his life be spared, as we trust it may be for many years, from his acknowledged industry, his habits of thorough investigation, his ardent desire to contribute to the advancement of science, his labors will yet, we doubt not, result in great good to the cause to which he devotes the entire energies of his vigorous intellect.

The agriculturists of America are under great obligations to him for the course of lectures which are about to be presented to them, and we feel assured that they will prove of unspeakable advantage to the entire agricultural interest of our country.

Professor Johnston is a Fellow of the Royal Society of England, Honorary Member of the Royal Agricultural Society of England, Honorary Member of the New-York State Agricultural Society, and of several of the European scientific agricultural associations.

B. P. JOHNSON,

Cor. Sec. N. Y. State Ag. Soc.

To C. M. Saxton, Esq., N. Y.
Albany, Aug. 19th, 1850.

SALE OF MR. SHEAFE'S SHORTHORN CATTLE.

THIS great sale came off at the High-Cliff Farm, Dutchess county, N. Y., as advertised, on the 29th of August.

At 12 o'clock, M., upwards of 300 persons had assembled upon the ground, many of whom were opulent farmers of the neighborhood, and gentlemen from distant parts of the country. The stock was tied in a row six feet apart, in the same order they were numbered in the catalogue, in a fine grass pasture, just west of the farm house. They presented a front of upwards of 200 feet in length, and made a superb show. Though merely grass fed, the animals were in excellent condition, and reflected no little credit on the herdsman, Mr. Lawson, for his superior care in bringing them to the post. The whole thing was admirably arranged, and a gentleman present said, it reminded him of the great sale of shorthorn cattle, which took place at Castle Howard, seat of the Earl of Carlisle, in England, in 1839.

A bountiful collation was provided under a large awning, of which the company were invited to partake, as they came on the ground. This finished, and fifteen minutes grace allowed, for laggards behind time, Mr. A. B. Allen—to whose care Mr. Sheafe had left the stock and farm—called the company to order at a quarter past one, P. M., and proceeded to address them for about ten minutes, on the value of this highly-improved stock to the dairymen and graziers of the country, and also as an additional ornament to the grounds of country gentlemen.

Mr. J. M. Miller, the auctioneer, now commenced the sale. The bidding was highly spirited, and the 33 animals in the catalogue, together with two others dropped since it was published, making 35 in all, were struck off within an hour. He then proceeded to the working cattle, sheep, and swine, which took nearly another hour. The pair of working oxen brought \$142.50; the sheep and swine sold comparatively low. A few grade shorthorns, not advertised nor put into the catalogue, were disposed of afterwards, at private sale. The sum total of the stock sales, on that day, was a little over \$5,000.

Although the prices obtained for this herd were not what they ought to have been, to remunerate a careful breeder, still, they are so much higher than the same quality of animals would have brought at any time for the past seven years, that it looks more encouraging to the producers of improved stock. We trust that the farmers of America will yet have spirit and intelligence enough to arouse themselves to equal their English brethren on the other side of the Atlantic, who have long been, and still are annually reaping a rich harvest in the production of superior domestic animals.

No. 1. Dahlia 1st, calved June, 1836. A. L. Allen, Poughkeepsie, N. Y., \$47.50.*

No. 2. Dahlia 3d, calved April, 1846. S. B. Parsons, Flushing, N. Y., \$95.†

No. 3. Dahlia 4th, calved April, 1847. J. T. Moore, Rahway, N. J., \$105.

No. 4. Dahlia 5th, calved April, 1849. George Vail, Troy, N. Y., \$60.‡

No. 5. Beauty 3d, calved March, 1845. Lorillard Spencer, Westchester, N. Y., \$180.

No. 6. Beauty 4th, calved April, 1846. S. B. Parsons, Flushing, N. Y., \$125.

No. 7. Beauty 5th, calved April, 1849. S. B. Parsons, Flushing, N. Y., \$80.

No. 8. Phœbe 2d, calved April, 1844. William Kelly, Red Hook, N. Y., \$145.

No. 9. Phœbe 3d, calved March, 1845. Lorillard Spencer, Westchester, N. Y., \$160.

No. 10. Phœbe 4th, calved June, 1847. H. & J. Carpenter, Poughkeepsie, N. Y., \$100.

No. 11. Phœbe 5th, calved March, 1848. George Vail, Troy, N. Y., \$125.

No. 12. Phœbe 6th, calved March, 1850. S. B. Parsons, Flushing, N. Y., \$75.

No. 13. Phœbe 7th, calved April, 1850. Lorillard Spencer, Westchester, N. Y., \$80.

No. 14. Lucilla 1st, calved June 1837. Sick, and withdrawn.

No. 15. Lucilla 2d, calved April, 1846. S. B. Parsons, Flushing, N. Y., \$125.

No. 16. Lucilla 3d, calved December, 1848. George Vail, Troy, N. Y., \$125.

No. 17. Lucilla, 4th, calved April, 1850. J. T. Moore, Rahway, N. J., \$80.

No. 18. Cream Pot 2d, calved March, 1845.

*Being fourteen years old, she was considered a doubtful breeder.

†Had lost one teat.

‡Two gentlemen present informed us after the sale, that they had marked on their catalogues to bid \$100 and \$105 for this heifer, but by some unaccountable mistake, had let her go without doing so.

Lorillard Spencer, Westchester, N. Y., \$175.
 No. 19. Cream Pot 5th, calved April, 1846.
 Lorillard Spencer, Westchester, N. Y., \$140.
 No. 20. Cream Pot 6th, calved March, 1848.
 Phillip Burrowes, Staten Island, N. Y., \$125.
 No. 21. Cream Pot 7th, calved April, 1848. H. & J. Carpenter, Poughkeepsie, N. Y., \$145.
 No. 22. Cream Pot 8th, calved March, 1850.
 J. C. Jackson, Astoria, N. Y., \$50.
 No. 23. Cream Pot 9th, calved March, 1850.
 J. B. Holmes, Croton, N. Y., \$70.
 No. 24. Seraphina 2d, calved March, 1845.
 S. B. Parsons, Flushing, N. Y., \$105.
 25. Celeste 2d, calved March, 1848. J. Dickinson, Fordham, N. Y., \$185.
 No. 26. Daisy 1st, calved August, 1843. S. B. Parsons, Flushing, N. Y., \$90.
 No. 27. Daisy 2d, calved April, 1850. S. B. Parsons, Flushing, N. Y., \$50.
 No. 28. Fun, calved September, 1844. George Vail, Troy, N. Y., \$170.
 No. 29. Violet 1st, calved April, 1847. J. C. Jackson, Astoria, N. Y., \$100.
 No. 30. Violet 2d, calved April, 1850. — Ellison, — \$55.
 No. 31. Bull calf, dropped March, 1850. J. B. Holmes, Croton, N. Y., \$105.
 No. 32. Bull calf, dropped March, 1850. — Margit, Long Island, N. Y., \$105.
 No. 33. Exeter, (imported,) calved June, 1848. L. F. Allen, Black Rock, N. Y., \$500.
 No. 34. Seraphina 3d, calved May, 1850. J. C. Jackson, Astoria, N. Y., \$65.
 No. 35. Bull calf, dropped by No. 20, Cream Pot 6th, August 25th, 1850. Phillip Burrowes, Staten Island, N. Y.

The sale being finished, the company dispersed, seemingly highly gratified at the proceedings; though a few were somewhat disappointed that they had not been able to purchase within their limits. We understand an advance has been offered on several of the animals since their sale. We hope this may be an encouragement for larger and better sales hereafter, and that they may be got up in different parts of the country; for it is quite an advantage for the farmers to meet in this manner, to examine stock, and exchange ideas on various subjects connected with their calling.

Mr. Miller, the auctioneer, acquitted himself excellently well, and won the good opinion of all parties concerned. Having a taste for fine animals, and keeping a few himself, on his own farm, we think he is all the better qualified for his business, and bespeak for him the favor of our friends, on similar occasions.

SOWING IN DRILLS.

It has become quite a fashion with editors of the agricultural papers, to recommend sowing seed in drills; yet, with this abundance of kind feeling, no one undertakes to describe the *modus operandi*.

Now, Messrs. editors, in your superabundance of human kindness, inform us how far the drills should be apart, how many seeds to the hole, the depth the seed should be placed, and all the etceteras of drilling, taking wheat and corn as

the supposed bases of experiment. If not in time for the present month, it will do for the next year.

J. B.

Anapolis, Md., August 24th, 1850.

From numerous experiments made in various countries, for more than one hundred years, the drill system of sowing wheat has proved more profitable in the minds of cultivators, than by sowing broadcast, as in the common way; because, the wheat plants receive much more nourishment from the ground and air, than when grown in a thick and close position. The operation of sowing is usually performed by means of a machine called a "drill," which is constructed in such a manner, as to distribute the seed with the greatest exactness, and at any required distances apart, so that the precise quantity proposed, may be sown upon any field, and, at the same time, the seed equally distributed over all, and covered at a proper depth. But there is still a greater advantage that attends sowing by the drill—the regularity with which the seed is sown, allows the plants to be cleared of weeds, with little trouble, and at no great expense.

The quantity of seed proper to be sown, of course, depends upon a variety of circumstances, as, for instance, the kind of seed, the season of sowing, and the situation and qualities of the land. As a general rule, if the ground is not thoroughly pulverised, which it ought to be for the business, wheat may be sown in drills, at seven to twelve inches asunder, and from three to six inches apart in the drills only one grain in a place; for, the coarser, stiffer, and rougher the earth, the greater the distance it should be sown apart. But, if the ground is very fine, warm, and loamy in its character, six to ten inches asunder is sufficient for the drills, and two and a half to five inches apart for the grains in the drills. The depth to which it should be covered may vary from half an inch to an inch.

The eight-rowed yellow variety of Indian corn, when cultivated for its grain, may be sown in drills three feet asunder and six inches apart in the drills, one kernel in a place, and covered the same depth as above.

FIELD CROPS IN OTSEGO COUNTY.—Wheat, by George W. Deming, 33 bushels per acre; others 30 and 25. Rye, by O. C. Chamberlain, 30 bushels; others 28 and 33. Buckwheat, by Gustavus White, 41 bushels; others 30 and 29. Barley, by Wm. G. Northrup, 57 bushels; others 38 and 33. Oats, by Wm. Davison, 81 bushels; others 87 and 86. Corn, by Abijah Barnum, 93 bushels; others 85, 84, and 75. Peas, by Jos. Cheney, 32 bushels; others 25 and 18.—*N. Y. State Transactions.*

CULTIVATION OF BROOM CORN IN MONTGOMERY COUNTY.—The raising of this crop is on the increase along the valley, and brings from \$20 to \$30 per acre on the field, when ready to cut. From 800 to 1,000 acres are now planted; about one fourth of the brush is made up in the county, and the remainder out of it.

TENTH ANNUAL SHOW AND FAIR

OF THE

N. Y. State Agricultural Society.

WE have to record another jubilee for the farmers of New York, and another triumph of their skill. Their annual show was held on the beautiful grounds adjoining the Bull's Head, a mile above Albany, on the 3d, 4th, 5th, and 6th of September. In the extent of its grounds, in the number of its specimens on exhibition, in its receipts and disbursements, and especially, in the vast multitude that thronged to witness the scene, this show surpassed all that has preceded it. The buildings and tents for the transaction of business, and the display of articles were tasteful and commodious; the facilities for the ingress and egress of vehicles and pedestrians were ample; and the entire arrangements were such as to reflect much credit on the officers of the society.

There was a serious inconvenience resulting from the peculiarity of the grounds, which the executive committee should be careful to obviate in future. The soil is an adhesive or pasty clay, which the heavy rain of the Monday preceding had thoroughly saturated, and wherever there was a depression in the surface, it was occupied by a soft mud, even three days after the rain; and while a strong south wind brought a dense and continuous cloud of dust from the adjacent road, considerable portions of the long ranges of cattle, which were located on a declivity, were almost inaccessible, except to those well shod with water-proof boots. A violent rain on Thursday night rendered walking on the following day, quite intolerable on every part of the show grounds. Now it appears to us, that the health and comfort of one or two hundred thousand human beings is of too much consequence to be thus jeopardized. It should hereafter be provided for, that the show grounds and their leading avenues shall be so arranged as to avoid the annoyances of both wet and dry. A loamy absorbent soil will prevent the one, and the expenditure of a very few dollars for watering carts, will avoid the other. We trust this matter will be fully heeded in future.

Another and highly important suggestion we have to make, is, that the entire premises surrounding, or within convenient reach of the show grounds, should be withheld from the occupancy of circus riders, thimble riggers, professional gamblers, and the whole race of loafers and vagabonds of every hue and description. These leeches, like the carrion birds that follow an army, are in pursuit of plunder, however it may be come at, and they should be repelled by the strong arm of the law, at all hazards. No city nor town that failed to protect the community against their presence, should enjoy the benefit of providing for the annual show.

Another consideration, and we have done with the disagreeables. We saw fewer of the military on the ground, as *military*, than usual; but there were some, and even a few are ob-

jectionable. We think such commodities as these, together with firemen, or any other specimens of the genus homo, in their associated or corporate capacity, should be reserved for their more appropriate display in Broadway or other densely-packed streets, where they can challenge universal admiration from the gaping holiday misses and children that usually surround them. But cattle shows are not the place for them, in their professional garbs. They evidently come not to see, but to be seen. They can accomplish the former, by doffing their badges and peculiar costumes, and appearing in a citizen's dress, in which we should be as happy to see and welcome them, as we are the farmers themselves, for whose special benefit these gatherings are instituted.

The amount of money received was much larger than any previous year, which was as follow:—

Members' tickets,	\$4,426.62
Tickets at the gate, at 12½ cents,	\$6,076.57

Total,	\$10,503.19
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This exceeds the Syracuse receipts \$2,321.06, and at Buffalo, \$4,186.81. The amount of premiums to be paid, nearly \$6,000 dollars. The other expenses not yet known. It is ascertained from the books of the society, that there were gentlemen present from 24 states—from New Brunswick, Nova Scotia, Canada, East and West, Oregon, California, Mexico, South America, and a sprinkling from England, France, and Belgium. The number in attendance, taking our receipts as the criterion, cannot be less than 90,000. Many, of course, make a much larger estimate, but the receipts upon a calculation founded upon the expense of past years gives the above as the probable number.

The number of entries of stock, as near as can be ascertained, were, cattle, 475; sheep, 567; horses, 286; all others, 158—1,486—machines and farm implements, 1,301; dairy, 90; grain, 68; vegetables, 167; stoves, 247.

The *Horses* on the ground were numerous, among which there were many of great excellence. There were no less than four imported bloods, of which Trustee, the sire of Fashion, and Consternation, the parent of an admirable race of road horses, in Central New York, were pre-eminently conspicuous. There was a family of the Henry horses, (not the defeated Henry from Virginia,) but the descendants and copies of a strong, well-made horse-of-all-work, that occupied a stable for some years in this state, and was subsequently removed to New Haven, where, as has been the fate of many other good horses, he is said to have been poisoned. But the horse that came nearest to our ideas of the horse-of-all-work, and which took the prize in this class, was the Morse's Gray, a horse we have before commended to the notice of the lovers of utilitarian horse flesh. With spirit, fleetness, fine form, hardiness, strength, and endurance, he combines a docility of disposition that pre-eminently fits him for the service and companionship of man. These qualities, unmistakably mark him as nearly allied to an

Arabian parentage, which conclusion, the origin of his sire confirms, he being selected in Italy, by one of the principal officers of Napoleon's army. Many of his colts were also on the ground, one or more of which took the first prize in its class, and all reflected great credit on their breeding.

There were many excellent specimens of the Morgan horse, both from this state, and Vermont, whose merits, as road horses, it would be difficult to surpass, for their size. There were numerous other good horses of all grades, from the thorough bred, to the most unwieldy cart horse, besides a goodly display of breeding mares and their colts. The number of match horses was not so great nor meritorious as we have before seen. Albany county, alone, could make a better display, we think, had there been a proper public spirit to have called them out.

Cattle.—The show of cattle, as to numbers and excellence in some of the classes, has never been surpassed, if it has ever been equalled in this country. There were many shorthorns and Devons, and of great merit. There were the shorthorn bulls Duke of Cambridge, Earl Seham, and Vane Tempest, imported by Messrs. Sherwood and Stevens, and Waldeman, imported by Mr. L. Spencer. There were other choice animals, either imported or immediately descended from choice imported stock, but we cannot afford the space to enumerate them. A few excellent Herefords were shown, by Messrs. Keese & Corning. Fine Ayrshires were on the ground, from the herds of Mr. Prentice, the President, Mr. McIntire, the Treasurer of the Society, Mr. R. L. Colt, and others. Two pretty specimens, both male and female, of the Alderney and Hungarian cattle, were shown by Mr. Colt. The latter had the dingy muzzles and drab, mulish dress of the Alderneys. They are, however, hard handlers, and we much doubt, like the institutions of their patriotic countrymen, they are not a full century behind the best type of modern civilisation and improvement.

A good many natives and grade animals were there, and some of them decidedly meritorious. The working and fat cattle were much less numerous than are brought to the show grounds in the middle and eastern part of the state; but there were some of each, it would be difficult to excel. We have never seen a more symmetrical nor beautiful specimen of fat oxen, than the pair of shorthorns, so exquisitely flecked with red and white. When reclining on the ground, a hillock of tulips and hyacinths, carnations and roses, could hardly have exhibited more brilliancy and attractive beauty.

Sheep.—There was not a full show in this department, and especially, among the fine wools, so abundant in this part of the state. There were some noble specimens of the large French Merinos, originally imported by Mr. Taintor, and now owned by the Messrs. Bingham, which shear very large fleeces, and of a good quality. Saxons, as large as the Spanish Merino, also recently imported, were exhibited. Specimens from more than one large native flock were shown, the owners of which assured

us, that, with ordinary keeping and attention, their fleeces had for several preceding seasons, averaged over \$2 per head. Such cannot but be profitable stock to any farmer having soils and locality adapted to them. There was a pretty full representation of the South Downs, and many of them very choice animals. The prizes were divided among the old competitors, Col. Sherwood, Messrs. Rotch, McIntire, and Wakeman. The long wools were also good, but not abundant. This family of sheep are extending rapidly throughout the country, and promise soon to afford us an ample supply for all our growing manufactures of combed wool.

Swine were not very plenty, but such as were on the ground exhibited quite a passable merit. There were delegates from the leading breeds, Berkshires, Lincolnshires, Suffolks, &c.

The Poultry was less numerous than last year, but there were many fine birds, both land and aquatics, that did great credit to their breeders.

Rabbits of formidable proportions, and immense lopped ears, were shown from the warren of Mr. Rotch. Many of these will yield a hind quarter, equal in size, while they surpass in flavor, some of the lambs brought to our market.

Farm Implements.—Of these, there was a large number of very meritorious character. Most of the manufacturers and dealers in plows and farming tools sent in choice specimens of each, and perhaps the show, in this department, has never, on the whole, been surpassed, certainly not in the merit of the articles, if it has been equalled in their numbers.

The Dairy Products, Salt, Maple Sugar, Flowers, Honey, Vegetables, Grain, Seeds, Fruit, Domestic Manufactures, Miscellaneous Fabrics, Needle Work, Embroidery, Paintings, Musical Instruments, &c., were all displayed in their usual profusion and excellence, and did great credit to the skill and enterprise of their exhibitors, and the intelligence and liberality of the great society which has been the means of calling them out.

The Annual Speech, by Amos Dean, Esq., we had not the pleasure of hearing, but it is spoken of as doing great credit to its intelligent author, and well calculated to push forward the career of agricultural improvement throughout the Empire State.

THE SHORTHORN BULL METEOR.—Mr. Vail, of Troy, the owner of Meteor, requests us to say, that he was not entered as extra stock, for competition, at the late show at Albany; but was there merely for exhibition, and was so entered on the State Agricultural Society's books.

TRENCHING OLD ORCHARDS.—If you have any neglected old trees in your orchards, fork or trench up the earth all around their trunks for a distance of four or five feet, and give to each tree at least a bushel of compost, made of equal parts of stable manure and leaf mold or swamp muck. And at the top of this, spread half a peck, to each tree, of charcoal dust, wood ashes, and oyster-shell lime.

REVIEW OF THE AUGUST NUMBER OF THE AGRICULTURIST.

To Postmasters and Others.—Among the "others," if you will include a certain set of dolts and demagogues who block the wheels of Uncle Sam's mail wagon, with high rates of postage, and dray loads of "free documents," until you lash them into a little show of common sense and honesty, so they will amend the law, into something of a common-sense form, and then there will be no occasion for "mistaken mortals" mistaking the rate which they should charge upon the *Agriculturist*; for then, every *periodical* of every kind, will be rated at *one cent* for 1,900 square inches of printed matter, whether on white paper or brown, and then we shall be able to get "our paper," with a cover, without being subjected to a ridiculous charge of four cents for a piece of cotton thread four inches long, "stitched" through the paper, making it a "pamphlet." Bah! what nonsense.

Capacity of Soils for Absorbing Fertilising Matter.—If the capacity of the minds of those who own said soils were half as great to absorb that which is beneficial, they would be "deodorised" of a vast amount of offensive matter, and out of this very article absorb an amount of knowledge sufficient to pay for a dozen years' subscription to the *Agriculturist*, if judiciously applied to their business.

Food of Calves.—I believe every word of this, except calling a cow a "dam," and I will believe that, if Noah Webster says I must; but this is the first time I ever heard *dam* applied to a cow in that way. But I can assure the writer that he would have made a much more popular article if he had insisted that "hay tea," "buttermilk porridge," or "sawdust broth," is decidedly better for feeding calves, than the milk of their own mothers. It will not do for an Englishman to talk to us butter-mouthed Yankees in this style, about keeping a portion of cows to make butter and cheese, and another portion to suckle calves. No sir. We will not only feed them on buttermilk and whey, but quarrel with you for disputing that such feed does not make the best calves.

Everything Should be Done Systematically.—Everybody knows that—everybody says that—nobody does it. Yes they do. Some folks are systematically wrong—always wrong—always too late at seeding, and too late at harvest. But is it "reprenensible to leave everything where it was last used?" I have a neighbor in my eye now, who, if he would leave that old black jug where he last used it, would leave one thing in the right place, and then he would be likely to have a better plow than he works now; and if he stuck it deep into the soil, that would be in the right place. "That is the doctrine for farmers." Be temperate, frugal, industrious, plow deep, and be happy.

Horse Breeding in Russia.—When will republican America so far imitate despotic Russia, as to establish a national stable for the improvement of the breed of horses, or breed of anything else for the benefit of agriculture? When water ceases to run, wood to grow, and dema-

gues to talk. Shame on those who have the power to elevate the interests and character of the cultivators of the soil, and do it not. Let us look to Russia for a pattern. I wish all translators of articles from foreign languages would translate the money terms into sums that we can understand. Although told in a note by the editor, the value of "rouble," and a "kopeck," who will stop reading, to cipher out how many dollars and cents there are in "88,625 silver roubles and 88 $\frac{1}{4}$ kopecks?" Not one in a thousand. Such outlandish terms always spoil the interest of an article. Let them be translated.

Proposed Remedy for Stealing Fruit.—Which, being also translated, means "a good plan to prevent everybody from stealing fruit." I would also suggest that every roadside be planted with fruit trees, instead of those merely useful for shade. The shade of an apple or a cherry tree is as good as the shade of an oak, and grows as soon. If the heathenish, hogdish, highway-robbery system of letting cattle and pigs run at large were abolished, how we might ornament the roadside, and gladden the hearts of travellers with free fruits and flowers. No one, then, would climb the fence to steal. What a blessed country we should have if we would. What a wicked waste of land we now have in our useless roadsides.

In connection with this article, I pray the reader to notice the little item, the "Value of an Orchard." Perhaps you recollect an article published last fall of the profits of a four-acre peach orchard near Newburgh, exceeding that of any other cultivated land in the country, except some garden spot or nursery. Plant trees. If you cannot plant an orchard, plant a single tree; it will be doing good to somebody. It will help make all mankind better, if all plant trees. Who then will steal fruit? Let children be taught in school and around the hearth stone, that, as soon as the buds of spring give promise of early leaves and flowers, they shall each plant a tree, which shall stand as a memento to remind them that "this is my first lesson how to prevent boys from stealing fruit."

The Rolling Stone Gathers No Moss.—A very sensible little item against the universal all-pervading disposition of American farmers to migrate—a disease that is often destructive to life, very often to health, more often to comfort and happiness, and still more often to a systematic course of improvement, by which the "old homestead," that is abandoned on account of its unproductiveness, would become fertile again, and yield a greater profit than some of the rich lands of the west.

There is none, or but little *love of home* among the American farmers. One of the reasons, is, because they change that home so often, there are but few "homes of taste," which, as you say truly, are only to be found where the "Architect of nature" is employed to ornament them. With more abundant cheap materials to form such houses, we probably have fewer of them than any other country on earth, which contains as many intelligent minds as this does. But unfortunately, we have no schools to teach

the "science of farming," and creating such houses; and so our people lack contentment in places that might be like a rural Paradise, because the attractive blandishments of taste are not there; and so they sell at the first "fair offer" and sever the easily-broken links that bind them to home, and away they go to the gold-teeming lands of California, or to some wonderful wheat-growing land in the west, where avarice helps them shake off all disposition ever to make such a home of taste as will bind them and their children to it, generation after generation.

To Measure Standing Trees.—There are thousands of American woodsmen that will measure the height of a tree by the eye, as accurately as your French method. "May their shadows never be less."

Irrigation.—What is the use of talking to people, and giving them plans of irrigating land while they contend that "it is no use;" or why talk to them about draining off the water at one season and watering the land at another, while they can "make a living" upon the old let-alone system? "Oh! leave them alone in their glory" of ignorance. Why will you make people unhappy. "Ignorance is bliss."

To Destroy Weeds in Walks.—Capital! A strong way of impressing the name of a substance upon the mind, as the following will illustrate. "Father," said my daughter Mary, (who is somewhat of a gardener,) on reading the article under this title, "I wish you would buy me some chloride of sodium, the next time you go to the city, and I will try to kill the weeds that are constantly springing up in the brick walk to the summer house; as I am particularly anxious to keep that clean, because I notice you often come out there in your slippers of a morning, to have a little chat with your 'pet,' about gardening and farming and such things as you know I am fond of, and in turn, I would like to give you a clean path. So, if you will get the article, I will try the recipe."

"Certainly, my daughter. It always gives me pleasure to do anything to gratify your taste for improvement, and beautify our happy home. Pray, step to my bookcase and bring me a chemical dictionary. Now look for *chloride of sodium*, and perhaps you will not require me to make an especial purchase for your particular use."

"Why, dear me, father, I don't think I shall. Neither do I think I ever shall forget that *chloride of sodium* is common table salt. What a misfortune it is to be ignorant. But I am sure, father, that my schoolmaster never taught me such things, nor took such a method to salt them down in my memory."

Remarks on Improved Implements.—Does my young friend mean to be understood that a plow cannot be bought for five dollars, that has one word of good sense to recommend it? And that a plow of that cost will only "answer some kind of purpose," that is a good-for-nothing purpose? Such is his language, for he says distinctly, "the cheap plow cannot do the work right, because it never was made right." It is very evident, friend Levi, thou hast never been through

the New-York Agricultural Warehouse, or you would have seen a dozen different sorts of plows at prices under five dollars each, which are "made right" and work right, and as perfectly as your ten-dollar plow.

Great Crop of Hay.—There is a friend at my elbow, who gives it as his decided opinion "that any one must be in a "green state" to doubt the ability of Connecticut-River lands to produce four tons of hay to the acre, when cultivated according to the dictates of common sense. And yet, there are mowing lots within sight of this one of Mr. Clapp's, owned by men who think they cannot be taught anything about farming, which do not produce four tons in four years. A reading "scientific farmer" cultivates one, an "experienced farmer," cultivates the other. Comment is unnecessary. "Facts are stubborn things." "Experience" may not learn—perhaps his children will.

Your Neighbor's Hens.—Capital! It reminds me of an anecdote in the hen line. Mr. A. kept his hens shut up. He was not going to have his garden destroyed by his own, nor his neighbor's hens. One morning, he saw a couple digging into his early pea bed, and out he went with murder in his heart, but the hens flew over into neighbor B.'s garden; whereupon A. called over to him very angrily, that he would shoot the next hen he saw on his side of the fence, if B. did not shut them up, which B. declared "he would not do, and if A. was fool enough to shoot them, he might do it, for all he cared." A. was as good as his word, and day after day B. was saluted with the smell of gunpowder, and a message thrown over the fence with every fat pullet, "there's another chicken for your dinner," until at length, not finding the usual supply, B. called over one morning to neighbor A. to know the reason. This awakened inquiry, when it was discovered that A. had been shooting his own hens as they occasionally escaped through a hole in the coop, and in his anger at his neighbor for the supposed trespass, had furnished him with sundry good dinners. No doubt "he was a little mad at first," and thought any "cunning trick" after that, better than shooting his neighbor's hens.

Spaying Sows with Oil of Vitriol.—What next? I pause for a reply.

Cultivation of Orchards.—Upon such land as described, if it is as stony as some lands I wot of in Connecticut, I would dig a trench four feet wide and deep, and fill it half full of loose stones, in a direction that would serve as a drain, whether crooked or straight, and upon this return the soil and set the trees. The difficulty in digging holes in clayey land, for trees, is, that they fill with water, which would be sure to kill the young trees, only that they are so tenacious of life, they live through a deal of bad management.

Starch from Indian Corn.—No doubt this article will surprise many of your readers more than it did myself, because I have concluded not to be surprised at any of the wonderful strides of science, in these latter days. Starch from Indian corn, though one of the last wonders,

will not be likely to prove the least, according to this interesting statement.

Sale of Mr. Bates' Shorthorns.—This seems to have been, although a sale of shorthorns, a sale of long-horn prices. I see one calf was sold at \$330, to come to the United States, an amount that would purchase a hundred and fifty head in some parts of this country. This is a fair show of the difference between improved cattle and scrubs.

Sebright Bantams.—I have no objection to any one amusing himself with a few such fowls as pets. But the disposition to substitute them for the good old sort of domestic fowls, under the plea that their flesh is so tender and delicate, and eggs so sweet, is carrying improvement down hill at a most ridiculous rate. A cock sparrow might show fight, but would hardly be worth the trouble of breeding for any utilitarian purpose.

Shrubby Cinquefoil.—If the spread of this modern enemy of the farmers of Connecticut, should be the means of driving them into a general system of underdraining, as hinted at by Mr. Gold, I should not look upon it as so serious a curse as many of them do. There is no doubt in my mind, but draining will cure the evil, and that, with a system of deep plowing and better cultivation, which is as much needed in that state as any other land on earth, the products will be greatly increased, and farming made so profitable that we shall not need go to Egypt, nor any other outlandish country for corn. I assure you that draining is a better remedy than growing timber to get rid of the cinquefoil.

Mr. Robinson's Tour, No. 20.—“Benefits of Railroads to Agriculture.” I don’t like to criticise anybody’s style, but it does strike me, that, for a title to this article, “History of the South-Carolina Railroad” would have been more appropriate, as that is what it is, and as such is quite interesting, not only as matters of history, but containing a great deal of useful information for the traveller and merchant. By the way, the Agriculturist always contains a great deal of matter as useful to the merchant and mechanic, as to the farmer; and yet they excuse themselves from taking it, because “they have no interest in a farming paper.”

To Country Gentlemen.—A capital hit. If I had the wielded or a few thunderbolts, my first object would be to rattle down some of those “great, staring, ill-constructed temples,” you speak of; and then I would keep up such a din of thunder around the ears of owners, that they would rear up a “home of taste,” and adorn their grounds with animals, the beauties of which would delight the eye, instead of paining it with the view of naked portions full of ill-bred brutes. Come and look at my beautiful Devon cattle, in contrast with the plain old farm house and its furniture.

Ladies’ Department.—Here, upon one page of the Agriculturist, you have a dozen articles, any single one of which is worth more than the price of the paper for a year. I wish I knew how to induce my fellow creatures to read.

Every book or paper that I take hold of, leaves something new and often very useful. Ladies, look once more at this page of your particular department for August.

Poultry Management.—Here is an article from the London Agricultural Gazette, of about two dozen lines, that is worth just as much as the whole of some of the family of new “poultry books,” which have been hatched out the past year. It is highly deserving the attention of readers.

Mode of Saving Manure.—This should be entitled “a new way to make stable floors;” and a very good way it is, too. I have never seen a description of a better plan for keeping cattle dry. All the urine, of course, will pass off at once. In freezing weather, it will be found to be a most comfortable arrangement for stock. Why has it not been thought of before?

Cultivation of Cotton in India.—Notwithstanding what Mr. Bright, or any other honorable gentlemen may say about “the East Indies being peculiarly well calculated for the growth of cotton,” all experience says quite contrary; and there is no doubt but it will continue to be grown in the United States, cheaper, and of a better quality, than any other part of the world, just as it ever has been since the commencement of its cultivation.

Dissolving Bones in Sulphuric Acid.—Now do not forget this. It is a valuable article. It is far less expensive than grinding them.

There is, in every number of this paper so much that is good and useful to comment upon and call back the readers attention to, that I am compelled to leave many articles unnoticed and touch others but briefly, and then, in spite of me, my reviews grow into such length that I sometimes fear I shall remain unread; but if I am I shall not die with grief.

REVIEWER.

VALUE OF ANTHRACITE COAL ASHES FOR MANURE.—Mr. Bunce, of Yale laboratory, has presented an analysis of the ashes from anthracite coal, to the American Association for the Promotion of Science, recently held at New Haven. He shows conclusively that important ingredients for the growth of plants are contained in these ashes, and though much less valuable than those obtained from wood, yet, they are quite useful for agricultural purposes. We hope such of our farmers as have, or can easily procure them, will not fail to give them a full trial, on different crops and soils, and send us the result of their experience for publication.

PLOWING AND PLANTING FOR ORCHARDS.—If you design to plant out a young orchard, either this fall or next spring, the ground should now be twice thoroughly and deeply plowed, when not too wet, turning under at the second plowing a liberal coat of compost, formed of swamp muck, charcoal, wood ashes, and oyster-shell lime. At the extreme north, the trees may be planted towards the close of this month, agreeably to the directions given at p. 330, of our sixth volume.

PLOW FOR SUGAR PLANTERS.

MANY of our southern and Cuban friends have importuned us for a larger fluke or double-mold-board plow than we have already made. They have hitherto got them as best they could; some have bought them in France, at a cost of \$50 each, and others have been rudely made by citizen mechanics, or by plantation hands, at a large cost. We have, at last, consented to supply this article, and shall hereafter be prepared to fill all orders for them, on reasonable notice, at prices varying from \$10 to \$20, being about half the price heretofore charged for an inferior article. One of our Louisiana friends told us recently, that he run one of these large hillers, or double-moldboard plows through his sugar cane for the purpose of *laying it by*, or performing the last operation of hillling up the rows by plowing and hoeing. The cane rows were seven feet apart, and the plow was drawn by three mules. Eighteen arpents, (about six sevenths of an acre, each,) per day, were thus plowed, and finished with the hoe, by seven females, by which our informant estimates he saved the labor of eighteen good hands. This is a specimen of economy worthy the consideration of planters.

ENDLESS-CHAIN PUMP.

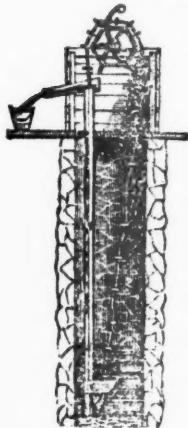


FIG. 79.

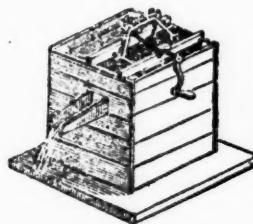


FIG. 80.

WE give above, the cut of a very simple pump, which is fast becoming quite popular with those who have tried it. For any depth not exceeding 25 feet, it works admirably; but when the height to which it is required to raise the water is much beyond this distance, a forcing pump may be substituted. The great advantages it possesses is ease of working, simplicity of construction, economy of price, and impossibility of freezing in winter. Price of pump, complete, from 50 to 65 cents per foot, according to size and length.

GUANO SPECULATORS.

A NUMBER of persons in Baltimore have fore stalled all the Peruvian guano to arrive this year, and have raised the price to \$56 per ton, by the quantity, and three cents per pound, at retail. We had made arrangements this fall to furnish the best Peruvian guano, at \$45 per short ton, wholesale, and two and a half cents per pound, at retail; and were it not for this com-

bination to speculate out of the hard earnings of the farmer, we should be able now to offer it at these comparatively low prices. In New York and its neighborhood, we can easily substitute fish and other manures for guano, and thus the effort at extortion will be defeated, so far as this part of the country is concerned; but in Maryland and Virginia, we understand substitutes are not so easily obtained, and the planters there greatly depend on guano for the production of their wheat crops. Notwithstanding this, and the injury they may suffer from the want of this excellent fertiliser, we hope the planters will combine against the speculators, and resolve not to purchase a pound till they reduce the price. By thus doing, they will compel them to sell at lower rates, as there is a demand for guano for no other purpose than to apply to the land; and we are advised of shipments already made, to arrive here in the course of the months of November and December, which will afford an abundant supply for any demand that is likely to occur. Planters will do well to bear this in mind, and turn the tables upon those who seek to tax their hard earnings so unjustly.

SUPERIOR NATIVE APPLES.

We have received three samples of native apples from a friend, in Westbury, Long Island, which we think quite superior kinds. The first is called the "pear-tree-lot apple." It is flat-round in shape, of a bright red-streaked color, and weighs from four to six ounces. It is of a sugary sweet taste, and almost as delicious for baking as the celebrated "belle bonne."

The second specimen is nearly the same shape and color as the first, mingled with a little more green or white. Its weight is from three to five ounces. It is of a delicate sweet taste, and a very fine apple for the table and for fattening stock. It is vulgarly called the "hog sweeting," from its originating on "Hog Island," in Oyster Bay. As they have changed the name of this fine island to the good old Indian cognomen of Syosset, we hope they will also change the name of the apple to "Syosset sweeting."

The third is called the "cream apple." It is of a flat-round shape, pale-green color, slightly flecked with little red spots, and weighs two to four ounces. It is very juicy, with a slightly tart and agreeable spicy flavor. It would be much better for our nurserymen to look up and propagate the best native apples, instead of sending abroad for so many varieties, as they are continually doing. The former, we know something about, the latter are altogether uncertain.

GATHERING AND STORING WINTER FRUIT.—

Winter apples and pears should be carefully picked from the trees by hand, packed up in barrels, and stored in a cool, dry room, in which the temperature ranges, as near as possible, to the freezing point. If such a room should eventually become too cold, put them in an airy, dry cellar, sufficiently cool as not to allow them to freeze.

TO OUR FLORIDA FRIENDS.

At the urgent request of many of our friends in this new and enterprising state, we beg leave to inform them, that our travelling agent, Mr. Solon Robinson, will visit them early in December, and remain for several weeks. He will travel there, as he has heretofore done at the south, as agent for the Agriculturist and our Agricultural Warehouse in New York. In his tour, he will make it his undivided object to disseminate information on practical and scientific agriculture, and demonstrate the use of new and improved implements. He will also place himself in the way of learning all that his limited time will permit of the nature of Florida soils, the best methods of culture, practised by her most enlightened planters, and the possibility of introducing the growth of new and superior products. Mr. Robinson will thus act in the double capacity of scholar and teacher; and we bespeak for him such attentions on his tour among this portion of our warm-hearted southern friends, as will be sure to render his sojourn among them both profitable and agreeable.

HEDGE PLANTS OF INDIA.

At a recent meeting of the British Association for the Advancement of Science, Dr. Hugh Cleghorn read a paper "On the Hedge Plants of India, and the Conditions which adapt them for Special Purposes and Particular Localities." The following is the list of plants observed by him in general use:—

Hedge Plants.—*Opuntia dillenii*, *Agave americana*, *Euphorbia tirucalli*, *Euphorbia antiquorum*, *Cæsalpinia sepiaria*, *Cæsalpinia sappan*, *Pterolobium lacerans*, *Guilandina bonduc*, *Parkinsonia aculeata*, *Poinciana pulcherrima*, *Mimosa rubicaulis*, *Inga dulcis*, *Acacia arabica*, *Acacia concinna*, *Vachellia farnesiana*, *Epicarpus orientalis*, *Jatropha curcas*, *Pisonia aculeata*, *Capparis sepiaria*, *Capparis aphylla*, *Scutia indica*, *Azima tetracantha*, *Gmelina asiatica*, *Balsamodendron berryi*, *Toddalia aculeata*, *Bambusa arundinacea*, *Bambusa spinosa*, *Bambusa nana*, *Dendrocalamus tulda*, *Pandanus odoratus*.

Ornamental Plants Forming Inner Fences.—*Lawsonia inermis*, *Lonicera ligustrina*, *Citrus limetta*, *Morus indica*, *Punica granatum*, *Phyllanthus reticulatus*, *Hibiscus rosa sinensis*, *Adhatoda vasica*, *Adhatoda betonica*, *Graptophyllum hortense*, *Gendarussa vulgaris*, *Gardenia florida*, *Alamanda cathartica*.

Plants Used for Edging Garden Walks.—*Pedilanthus tithymaloides*, *Vinca rosea*, *Heliotropium curassavicum*, *Rosa indica*, *Rosa semperflorens*.

Professor Royle considered this paper a most valuable one, and thought its title by far too modest for its merits. The importance of considering the adaptability of plants to particular soils and climates could not be overrated in all attempts at developing the resources of a country. Plants which would flourish in a rich alluvial soil would not grow in a sandy plain, and

vice versa. It was not always the case that indigenous plants were best adapted for culture in particular countries, and in India, they had many instances of introduced plants growing more vigorously, and extending more widely, than native plants.

PREMIUMS ON ENTIRE FLOCKS OF SHEEP.—We suggest for the consideration of the State Society the propriety of offering a large premium for the most profitable flock of sheep, consisting of not less than one hundred. The profit to be made up of the aggregate sale of the wool and lambs, after fully replacing from the latter the loss by deterioration or death. The quantity of green food or pasture should be estimated as nearly as possible, and all such as is capable of weighing or measurement, should be accurately ascertained. The expense of time and attention, as well as the annual value in rent of sheds, &c., should also be made an item in the calculation; and from the whole, the result is to be deduced. This, it seems to us, would enable many flock masters to decide the important question, Which is the most valuable breed of sheep?

VALUE OF ROADSIDE PRODUCTS.—The remark was made to us many years since, by a shrewd observer, that the spontaneous products of the roadsides in the vicinity of New York, were frequently more valuable than the adjoining fields. This is no doubt substantially true, for there are dandelions and other herbs for the table, and their roots for the apothecary; the elderberry blossoms for the herbarium, and their fruit for the pastryman and the manufacturer of genuine Port wine; the blackberry, the raspberry, the whortleberry, and the berberry, that frequently line the roads in boundless profusion, and yield large profits, when gathered for the market, besides numberless other minor and less general products.

STORING WINTER CABBAGES.—Such cabbages, at the extreme north, as you wish to keep through the winter and early spring, may be pulled up by the roots, and arranged in compact rows, with their heads downward, resting on the surface of the ground, so that their stalks will stand upright in the air; then, they may be covered with straw and earth, and treated in every other respect as directed for root crops. Should the weather be unusually warm, the earth and straw should be opened to let in air.

SUBSTITUTE FOR SOAP.—A late French author recommends potatoes, three fourths boiled, as a substitute for soap in washing hands. The use of this prevents chapping in cold weather, and retains the skin soft and healthy.

CHEMICAL FACTS.—Soils may contain silica and alumina; a plant may contain silica, but no alumina. Animals contain neither silica nor alumina.

Ladies' Department.**TO MAKE HOMMONY.**

I HAVE SO often been asked for our Maryland receipt for making hommony, that I send it to your journal, as the surest method of making it public. Some gristmills have a way of preparing it beautifully, by making a trifling addition to the machinery of the mill, which beats the hommony while the meal is being ground; but many people still prefer the old negro way, and many mills have not the new machinery. I wish I could tell the quantity of water it takes for any given quantity of corn; but the negroes do everything by guess; and when I asked the man who makes it best for me, the only answer I could get was, "jest 'xactly 'nuff, massa,oney don't let 'em make de corn too wet, dat spiles all."

Take a gum-tree or oak block, "jest 'xactly big nuff," and burn or dig it out to the depth of twenty inches or two feet; rub the hollow clean and smooth, and you have the mortar. A wooden pestle, equally rude, is formed, into the flat end of which drive gently, (for fear of splitting it,) the sharp end of a large-sized wood cutter's wedge; the broad end being thus ready for breaking and hulling the corn. The best corn must be carefully selected and shelled; moisten it well by pouring boiling water over it; when part is broken up and hulled, it should be taken out of the mortar, and fanned, again moistened with boiling water, and put in again; this fanning and moistening, (always with boiling water,) and beating to be continued until it is free from husks. Spread it out to dry, and then sift it, first through a coarse sieve, which will retain only the hommony, then through a fine one, which will retain the grits. The coarse meal that remains is excellent for cakes and puddings.

M.

ENGLISH vs. AMERICAN GIRLS.

THE English girl spends more than one half of her waking hours in physical amusements, which tends to develop and invigorate, and ripen the bodily powers. She rides, walks, drives, rows upon the water, runs, dances, plays, sings, jumps the rope, throws the ball, hurls the quoit, draws the bow, keeps up the shuttlecock, and all this without having it ever pressed upon her mind, that she is wasting her time. She does this every day until it becomes a habit which she will follow up through life. Her frame, as a natural consequence, is larger, her muscular system much better developed, her nervous system in better subordination, her strength more enduring, and the whole tone of her mind healthier. She may not know so much at the age of seventeen, as does the American girl; as a general thing, she does not; but the growth of her intellect has not been stimulated by hot-house culture, and though maturity comes later, it will proportionally last longer. Eight hours each day, of mental application, for girls between ten and nineteen years, or ten hours each day, as is sometimes required at school,

two hours for meals, one for religious duties, the remainder for physical exercises, are enough to break down the strongest constitution.—*English Paper.*

TOMATOES FOR WINTER USE.

TAKE the largest ripe tomatoes, which wash and drain; cut them across, and lay them with the cut side up, in an earthen or wooden vessel; sprinkle well with fine salt, and with alternate layers of tomatoes and salt; fill your vessel, and let it stand all night. In the morning, pour off the juice, with as many seeds as possible, and throw it away. Put them over the fire, boil slowly until reduced to a pulp, which rub through a sieve, to get rid of the skins. Add to this pulp. Cayenne pepper enough to season it highly, and if necessary, more salt; boil slowly for two hours, or until quite thick; stir well to prevent burning. When cold, put it into shallow, earthen plates to dry in the sun, or a slow oven. When quite dry, put it into glass jars, and if kept in a dry place where it will be free from mould, it will be as good at the end of the year, as when first made. A piece half an inch thick and three inches square will season a gallon of soup.

If wanted for sauce, soak it in warm water, add butter rubbed with crumbs of bread or flour, and stew for a few minutes before serving it.

To Boil HOMMONY.—To one quart of hommony, put two quarts of cold water, and a tablespoonful of salt; boil until the water is entirely absorbed. Take it from the fire, cover the pot closely, and set it on the hot ashes for fifteen or twenty minutes, to soak. Serve it in a deep-covered dish, with butter cut into small pieces, on the top. Those who like cream with it, may add half a pint while on the ashes. It is whiter and better tasted when boiled in a pot lined with porcelain, or in an earthen pipkin.—*Exchange.*

HOME-MADE CANDLES.—If you manufacture your own candles, immerse the wicks in lime water, in which a little nitre, (saltpetre,) has been dissolved, and dry them before dipping. The light from such is much clearer, and the tallow will not "run."—*Ibid.*

To PURIFY MOLASSES.—Boil and skim your molasses before using it. When applied for culinary purposes, this is a prodigious improvement. Boiling tends to divest it of its unpleasant, strong flavor, and renders it almost equal to honey. When large quantities are made use of, it is convenient to prepare several gallons at a time.—*Ibid.*

To BURNISH BRITANNIA WARE.—In burnishing Britannia ware, rub the surface gently, in the first place, with a woolen cloth, dipped in sweet oil; then wash in tepid suds, rub with soft leather and whiting. Articles burnished in this way retain their lustre till the last, if carefully used.—*Ibid.*

Foreign Agricultural News.

By the steamer Asia, we are in receipt of our foreign journals to the 1st of September.

MARKETS.—*Ashes* have fallen. *Cotton*, $\frac{1}{2}$ d. to $\frac{1}{4}$ d. per pound, lower. *Corn*, a trifle better. In other products there is no change.

Quantity of Bonedust Applied per Acre.—Lord Ducie, of England, it is stated, applies from sixteen to twenty bushels of rough bonedust per acre.—*Agricultural Gazette*.

To Destroy Mildew on Grapes.—Dust flour of sulphur on the white spots, the moment they are observable.—*Ibid.*

Death of Delile.—The French journals announce the decease of M. Raffeneau Delile, the celebrated botanist, who accompanied the scientific expedition of Bonaparte into Egypt, and afterwards published an account of the plants observed on that occasion.

Prolific Sow.—We have in our possession a sow that has had, in six successive farrows, the following numerous progeny:—1st, 18; 2d, 18; 3d, 19; 4th, 20; 5th, 17; 6th, 19; making a total of 111 in two years and six months.—*Agricultural Gazette*.

Dairy Management.—Scrupulous attention to cleanliness is an essential of dairy management—the scalding cleansing, and rinsing of the dairy vessels being of the greatest importance. No stable and drain should be near it, and the cheese itself, where possible, should be separated from it.—*Ibid.*

New Steep for Seeds.—“La Presse,” of Paris, speaks of some marvellous wheat obtained by the Messrs. Dusseau, by steeping the seed in some new preparation, which wheat is destined for the purpose. The magnificence of this grain, both in straw and ear, is represented as having excited universal admiration; and it is expected “to do the greatest honor to French agriculture.”—*Gardeners' Chronicle*.

The Brazilian Coffee Trade.—Forty-two years ago the annual crop of coffee in Brazil, did not exceed 30,000 bags; and even in 1820, it only reached 100,000 bags. About that time, the high price of coffee in England, superadded to the diminished production in Cuba, stimulated the Brazilian planters to extend its cultivation, and in 1830 they sent to market 400,000 bags, or 64,000,000 lbs.; and in 1847, the enormous quantity of nearly 300,000,000 pounds.

Extraordinary Large Sale.—Some time since, a person in the neighborhood of Keswick, having several hives of bees to dispose of, and being desirous to attract purchasers, caused a placard to be printed, announcing a sale, with these glaring head lines: Extraordinary sale of live stock, comprising no less than one hundred and forty thousand head, with an unlimited right of pasture.—*English Paper*.

Temperature at which Eggs Freeze.—An examination of the rates at which heat was lost by the several eggs, exposed to temperatures varying from zero to 10° Fahr., showed that fresh eggs, though they resist freezing longer than any others, lose heat more quickly; and that their resistance to freezing is due to the peculiar property of their albumen, the temperature of which may be reduced to 16° Fahr., or much lower without freezing, although its proper freezing point is at, or just below 32° . Other than fresh eggs lose heat comparatively slowly, but freeze as soon as their temperature is reduced to 32° ; fresh eggs lose heat more quickly, but may be reduced to 16° or lower; then, at the instant of beginning to freeze, their temperature rises to 32° .—*Agricultural Gazette*.

Cultivation of Pine Apples.—Maintain an artificial heat in your fruiting pines of from 70° to 85° by day

and from 65° to 70° by night. This temperature will be exceeded naturally, in hot weather, unless you take means to prevent it, by shading during sunshine, and giving air by night; both of which practices, under skilful management, are good. The thermometer must be your guide as to the time for applying artificial heat, in the morning and evening. The bottom-heat for fruiting pines should be from 80° to 85° , at the depth of 9 inches from the surface. If you cannot obtain this heat by adding a few inches of tan to the surface, between the pots, then it will be necessary to remove the plants, turn the old tan, and add a sufficient quantity of fresh material. We presume that you have no tanks for bottom heat, which would save you this trouble and expense, as well as prevent the plants from being checked every time they are taken out of the pits.—*Gardeners' Chronicle*.

A New Agricultural Plant.—*Jute*, (*Carchonis capsularis*), is an annual fibrous weed, now extensively cultivated in India, and imported into England for the purpose of manufacturing cotton bagging, carpets, and similar fabrics. It has sufficient strength to adapt it for use as cordage; but its tendency to rot, when exposed to wet, renders it unfit for this purpose. The price, on its first introduction into Europe, was \$150 per ton, now from \$50 to \$75. Another species of this genus, the *C. olitorius*, is also used for the same purpose. As both these varieties are natives of a southern clime, we suggest the propriety of our southern friends testing its cultivation south of the profitable limits for the growth of hemp and flax.

For the purpose of anticipating any inquiries that may be made on this subject, we say we are not aware of any of the plants in this country, and the only way of procuring them, probably, would be through some one visiting, or resident in its native country.

Adulteration of Coffee.—At one of the recent meetings of the Botanical Society of London, a paper was read by Dr. Arthur Hassall, “on the adulteration of coffee. He proceeded to detail, in a tabular form, the results of 34 examinations of coffee of all prices. From these, it appeared that the whole of the coffees, with two exceptions, only, were adulterated; that chicory was present in 31 instances, roasted wheat in 12, coloring matter in 22, beans and potato flour in one, only; that in ten cases, the adulteration consisted of but a simple article, in twelve of two, and in ten, of three substances; that in many instances, the quantity of coffee present was very small, and in others, not more than a fifth, fourth, half, and so on. Contrasting chicory and coffee, it was observed that while the coffee berry contains a quantity of essential oil, visible in small drops in the cells, and upon which the fragrance and the active properties mainly depend, not a trace of any similar oil is to be found in the chicory root. The properties of coffee are those of a stimulant and tonic, with an agreeable flavor and a delicious smell, in all which respects chicory is very greatly inferior. The adulteration of coffee with wheat, bean, and potato, Dr. Hassall considers to be altogether indefensible, since the substances have not one of the properties of coffee, belonging to them, and observed, that if the employment of chicory be deemed in any respect desirable, it should be sold openly, and not as at present, surreptitiously, and under the names of Ceylon, Berbice, Costa Rica, and Mocha Coffees, &c. The paper concluded with a hint addressed to coffee drinkers, that the coffee should be ground fine, in order to facilitate the liberation of the essential oils contained in the cells of the berry, and that an infusion, and not a decoction of it should be made, in order that the perfect flavor may be obtained.

Editors' Table.

IMPROVEMENT OF LONG-ISLAND LANDS.—On the 28th of May, on our journey to Ronkonkoma Lake, a beautiful sheet of water some 50 miles from New York, we stopped at Lake-Road Station, on the Long-Island Railroad, where a clearing of several acres had been made, and a commodious house erected for a hotel. The land had just been grubbed, (cleared of stumps and roots,) and was in process of being spaded with about twenty loads of barnyard manure applied to the acre. We again visited the same place on the 22d of August, and found the land a perfect garden, containing almost every description of culinary vegetable, of a heavy yield, and of the finest growth, and among them several acres of as good corn and potatoes as could be found on the island. No unusual pains, we are informed, were taken in the cultivation, which clearly shows that these lands are capable of yielding all that we have attributed to them.

THE FARMER'S GUIDE TO SCIENTIFIC AND PRACTICAL AGRICULTURE, No. 8, containing the first part of Professor Norton's American Notes, has just been published by Leonard Scott & Co., 79 Fulton street, N. Y. Price 25 cents.

EXECUTOR'S SALE OF STOCK.—We desire to call particular attention to the sale of Devon cattle, Southdown sheep, and Suffolk swine, advertised at page 327. They were mostly imported or bred by the late Mr. William Stickney. Judging from what we have seen of their produce, they must be fine specimens of their kind. We hope to see a large attendance at the sale, as it will afford such an opportunity to purchase as does not often occur.

PENALTY FOR GROWING THE CANADA THISTLE.—The legislature of Wisconsin has recently passed an act by which any owner or lessee of land, who shall knowingly permit the Canada thistle to go to seed on such land, is deemed guilty of a misdemeanor, and on conviction thereof, to be punished by a fine not exceeding five, nor less than one dollar, with costs.

A NEW IDEA.—At one of the iron mines in Lehigh county, Pennsylvania, where the water is drawn out of the mine by mule power, one of the animals refuses to work, unless he is ridden. To save a hand, they have mounted upon him an artificial monkey, and he works steadily, perfectly satisfied.

THE WHEAT CROP.—The wheat crop of four of the largest grain-growing states in the Union—Indiana, Michigan, Ohio, Iowa—is said to be equal in quantity and quality, to that of any preceding year. It is said that the surplus crop of Michigan will more than double the largest yield ever produced in that state.

WHEAT FROM DRILL CULTURE.—We understand that Mr. Andrew Y. Moore, of Schoolcraft, Michigan, has harvested by a harvesting machine, which reaps, threshes, cleans, and bags the grain, 280 acres of wheat in seventeen and a half days. The wheat was sown in drills nine inches apart, and was unusually stout, although there was a great deal of wet weather the past season, which prolonged the time of harvest.

AN EXTRAORDINARY COW.—Mr. Henry Smith, of Astoria, Long Island, has a Dutch cow, eighteen years old, that has not had a calf for two years, and yet she is giving sixteen quarts of milk per day. In her prime, she gave thirty-eight quarts per day. She has had fourteen calves, none of which were twins. If any one has a cow equal to this, we should be glad to hear from him.

GREAT PEACH TRADE.—It is estimated by those engaged in selling peaches in this city, that 75,000 to 80,000 baskets came to market on the 4th of September.

THE NATIONAL TEMPERANCE OFFERING, and Sons and Daughters of Temperance. Gift for 1851. Edited by S. F. Cary, M. W. P. of the Sons of Temperance of North America. New York: Richard Vandeen, 1850. Even in this book-making age, a good book is a jewel. The design of this elegant volume, seems to be, to add to the stock of pure temperance literature, already before the public, and to encourage those engaged in that great reform so full of blessings to the present, and promise to future generations. The book has been got up in elegant style, and finely illustrated with portraits of some of the most prominent reformers of the age. We bespeak for it a great sale, as a reward to the enterprising publisher.

VIRGINIA COPPER AND FARMING LANDS.—A correspondent and friend has written us several times, relative to what he deems very valuable copper mines and farming lands in and near Farquahar and Warren counties and their neighborhood. The offers made for selling, in whole or part, or for loaning money on the property, seem to us highly favorable for men of enterprise and capital, and any such, wishing further information on this subject, can receive it by calling on us personally.

BARK LICE ON ORANGE TREES.—A friend called upon us a short time since, with the agreeable intelligence that we had saved the orange trees of the south. Not readily comprehending the occasion of our hitherto unheard of success, a closer investigation led us to believe we may have been instrumental in effecting some benefit, on a few of the plantations in Louisiana. The orange louse, has for many years produced great havoc on the trees in most of our southern states, and one who was particularly afflicted in this way, called on us in New Orleans, some three or four years since, for a remedy. Not having any personal experience in the matter, we suggested that these parasites, like lice on starving or diseased cattle, were the result of scanty, or uncongenial food, (soil,) exhausted, perhaps, of some of the properties essential to giving vigorous and healthful growth to the tree.

Upon this hint he acted; and by digging about the roots, and manuring plentifully with compost, barnyard manure, ashes, and lime, he speedily secured a vigor that sent the whole of the marauders beyond the reach of further harm.

THE NEW PATENT MOUSE TRAP.—The August number of the Journal of the Franklin Institute contains the specification of a patented mouse trap. The improved mode of body snatching is as follows:—A savory piece of toasted cheese is suspended on a hook. Enter rat. A small mirror is so adjusted, that the rat sees his shadow in the glass, (just as Richard did,) and not recognising himself at first sight, thinks that some other rat is aiming for the cheese. He rushes in to head off his rival. The board he treads on is a deceiver. It is supported by a weak spring, (probably a patent truss,) which yields under his weight, and precipitates him into a lower story of the trap, when the floor flies up to resume its place. Another rat comes along, sees the reflection of his predecessor, as well as his own, and thinks two rats are fighting for the cheese. In he goes—down he goes, and so on, *toties quoties*.

The advantages of this trap are obvious. It economises cheese. It saves the animal alive, and affords to mankind and dog kind, the pleasure of subsequently killing him at their leisure. It teaches a useful lesson. Rats should study optics. They should learn to know themselves, and know their own face, when they see it in a glass. Hence our man rats are now beginning to crook their long hairs around their lips, and give them a characteristic curl, so that they may identify themselves by using a hair lip for an earmark.—*Pennsylvanian*.

Review of the Market.

PRICES CURRENT IN NEW YORK, SEPTEMBER 18, 1850.

ASHES, Pot,	100 lbs.	\$6.12	@	\$6.19
Pearl,	do.	6.00	"	6.12
BALE ROPE,	lb.	9	"	11
BARK, Quercitron,	ton.	38.00	"	41.00
BEANS, White,	bushel.	75	"	125
BEESWAX, American, Yellow,	lb.	20	"	26
BOLT ROPE,	"	10	"	11
BONES, Ground,	bushel.	45	"	55
BRISTLES, American,	lb.	25	"	65
BUTTER, Table,	"	15	"	25
Shipping,	"	9	"	15
CANDLES, Mould, Tallow,	"	10	"	13
Sperm,	"	25	"	50
Stearine,	"	25	"	30
CHEESE,	"	5	"	10
COAL, Anthracite,	2,000 lbs.	6.00	"	6.50
CORDAGE, American,	lb.	11	"	13
COTTON,	"	10	"	15
COTTON BAGGING, Am. hemp,	yard.	15	"	16
FEATHERS,	lb.	27	"	35
FLAX, American,	"	8	"	9
FLOUR, Ordinary,	bbl.	4.25	"	5.00
Fancy,	"	5.25	"	6.75
Richmond City Mills,	"	6.50	"	6.75
Buckwheat,	"	—	"	—
Rye,	"	3.00	"	3.12
GRAIN—Wheat, Western,	bushel.	1.00	"	1.40
" Red and Mixed,	"	80	"	1.00
Rye,	"	62	"	64
Corn, Northern,	"	63	"	66
" Southern,	"	59	"	63
Barley,	"	80	"	85
Oats,	"	39	"	45
GUANO, Peruvian,	2,000 lbs.	—	"	60.00
" Patagonian,	do.	50	"	40.00
HAY, in Bales,	100 lbs.	50	"	60
HEMP, Russia, Clean,	ton.	200.00	"	205.00
" American, Water-rotted,	"	160.00	"	200.00
" Dew-rotted,	"	140.00	"	175.00
HIDES, Southern, Dry,	"	9	"	10 $\frac{1}{2}$
HOPS,	lb.	10	"	20
HORNS,	100	2.00	"	10.00
LEAD, Pig,	100 lbs.	4.38	"	4.75
Pipes for Pumps, &c.,	lb.	5	"	7
MEAL, Corn,	bbl.	3.00	"	3.37
MOLASSES, New-Orleans,	gallon.	23	"	30
MUSTARD, American,	lb.	7	"	10
NAVAL STORES—Tar,	bbl.	2.00	"	2.25
Pitch,	"	1.25	"	1.75
Rosin,	"	1.15	"	1.25
Turpentine,	"	2.44	"	2.75
Spirits of Turpentine,	gallon.	30	"	33
OIL, Linseed, American,	"	73	"	77
" Castor,	"	1.50	"	1.60
" Lard,	"	62	"	75
OIL CAKE,	100 lbs.	1.25	"	1.50
PEAS, Field,	bushel.	75	"	125
" Black-eyed,	"	2.00	"	2.25
PLASTER OF PARIS,	ton.	2.00	"	2.75
" Ground, in Barrels of 300 lbs,	"	1.12	"	1.25
PROVISIONS—Beef, Mess,	bbl.	8.00	"	10.00
" Prime,	"	5.00	"	7.50
" Smoked,	lb.	6	"	12
" Rounds, in Pickle,	"	4	"	6
Pork, Mess,	bbl.	10.00	"	12.00
" Prime,	"	6.50	"	10.00
Lard,	lb.	6	"	7
Bacon Sides, Smoked,	"	3	"	4 $\frac{1}{2}$
" in Pickle,	"	3	"	4
Hams, Smoked,	"	5	"	9
" Pickled,	"	4	"	7
Shoulders, Smoked,	"	4	"	6
" Pickled,	"	3	"	5
RICE,	100 lbs.	3.25	"	3.75
SALT,	sack.	1.25	"	1.60
" Common,	bushel.	20	"	35
SEEDS—Clover,	lb.	6 $\frac{1}{2}$	"	9
" Timothy,	bushel.	2.00	"	3.50
" Flax, Clean,	"	1.60	"	1.65
SODA, Ash, (80 per cent. soda),	lb.	3	"	—
Sulphate Soda, Ground,	"	1	"	—
SUGAR, New-Orleans,	"	5	"	7
SUMACH, American,	ton.	35.00	"	37.00
TALLOW,	lb.	7	"	8
TOBACCO,	"	3	"	11
" Eastern, Seed-leaf,	"	15	"	20
" Florida Wrappers,	"	15	"	60
WHISKEY, American,	gallon.	25	"	27
WOOLS, Saxony,	lb.	40	"	69
" Merino,	"	35	"	40
" Grade Merino,	"	30	"	35
" Common,	"	20	"	30

NEW-YORK CATTLE MARKET.

At Market.—1,600 beeves, (900 southern, the remainder from this state,) 60 cows and calves, and 5,000 sheep and lambs.

Beeves.—Sales of good retailing qualities at \$5.50 to \$8. About 200 would remain over unsold. Market dull.

Cows and Calves.—Market active. Sales at from \$52 $\frac{1}{2}$ to \$27

\$50 to \$36, as in quality. All sold.

Sheep and Lambs.—Sales of sheep at from \$1.12 $\frac{1}{2}$ to \$4.75;

Lambs, 87 $\frac{1}{2}$ cents to \$3. Left over, 1,200. Sept. 10.

REMARKS.—Potatoes have rotted to a considerable extent in most of the Eastern States. The price has consequently gone up somewhat. Corn is now out of the way of frost, and with few exceptions, proves a decidedly good crop. Cotton is no longer doubtful. Had not an unusual breadth of land been planted, the crop would have been far short of the demand. Sugar, Rice, and Tobacco promise fairly.

TO CORRESPONDENTS.—Communications have been received from L. Durand, J., Samuel L. Thompson, A Young Farmer, Hugh Enton.

ACKNOWLEDGEMENTS.—Revue Horticole, from Paris; Premium List of Buck's-County (Pa.) Agricultural Society for 1850, from Thomas Warner; Premium List of the Fairfield-County, (Ct.) Agricultural Society for 1850; Cobb's Illustrated Domestic Bible, from Samuel Hueston, No. 1, 2, and 3.

SELLING OFF TO CLOSE THE BUSINESS.—Linnaean Botanic Garden and Nursery, late of William Prince, deceased. Flushing, Long Island, Near New York. **WINTER & CO., Proprietors.**

The proprietors have still remaining, a very considerable stock and variety of Fruit and Ornamental Trees, Shrubs, Vines, Plants, Roses, &c., which they will dispose of for cash, at a reduction of 25 to 50 per cent. and upwards, from the usual prices, according to kind and quantity. Descriptive Catalogues, gratis, on application, post paid.

Apple trees, two to four years old, from \$6 to \$10 per 100. Pear trees, two to four years old, \$25 to \$50 per 100. Cherry trees, two years old, \$12.50 per 100. Orange Quinces, three and a half to five feet, \$12.50 per 100. Black Hamburg and other Foreign Grape Vines, extra strong plants, \$5 per doz. Two-year old seedling Plum Stocks, \$7 per 1,000.

WINTER & CO.

TO PLANTERS.—Wants a situation as Farm Overseer—a Scotchman, about 35 years of age, married, who has a thorough practical knowledge of agriculture, in all its branches, as also, the management of stock; has had very extensive experience in the management of shorthorn cattle and sheep, and also in draining; has been about four years in America, can produce the most unexceptionable testimonials as to character and abilities, and would endeavor steadily to forward his employer's interests. Apply, post paid, to

A. FAIRGRIEVE,
Barnstable, Mass.

BONE MILL.—For sale, one Bone Mill, for horse power, complete, capable of grinding from 150 to 200 bushels per day. Also, a Steam-Power Mill, capable of grinding from 800 to 1,200 bushels per day. Engine of 16-Horse Power, with two boilers, of 25-Horse Power, all complete. Apply by letter, or otherwise, to

ALEXANDER HORNEY,
26th St., 9th Avenue, New York.

N. B. The Horse Power will be sold cheap.

NEW-ORLEANS AGRICULTURAL Warehouse, comprising a large assortment of Plows, Harrows, Cultivators, Fanning Mills, Corn Shellers, Corn and Cob Crushers, Straw Cutters, Ox Shovels, Ox Yokes, Grain Threshers, Corn Mills, Axes, Hoes, Shovels, and other Agricultural Implements. Also, Gardening Tools, Guano, Plaster, Rock Salt, &c. &c. Orders will be executed for every article wanted by Planters.

Geo. W. SIZER, cor. of Magazine and Poydras sts.

LONG-WORCESTERSHIRE LONG-WOOLLED BUCKS.—For sale, the subscriber has about 40 Long-wooled Bucks, which he will dispose of at any time when called for. This flock, which has been bred from some of the best ever imported, is so well known that they need no further description than to say that they continue to yield their very heavy fleeces—from 9 to 16 lbs. of washed wool; and when full fatted, will weigh upwards of 300 lbs., alive. This breed of sheep is remarkably healthy, very prolific, and make a profitable cross with the various breeds of this country, doubling their weight of wool and mutton. The price will be from \$50 to \$75 for Bucks, and \$25 to \$30 for Ewes, according to their quality. Gentlemen are invited to call and see for themselves, or communicate by mail.

CLAYTON B. REYBOLD, Delaware City, Del.

COCHIN-CHINA FOWLS.—For sale, a few pairs of Cochin-China Fowls, from John J. Taylor's importation, from Shanghai. Price \$5 per pair, delivered in New York.

E. BLANCHARD, 123 Fulton st., N. Y.

THE AMERICAN LIVE-STOCK INSUR-
ance Company, Vincennes, Indiana.
Charter Unlimited. Granted January 2d, 1850.

CAPITAL \$50,000!

For the Insurance of Horses, Mules, Prize Bulls, Sheep, and Cattle, of every description, against the combined risks of Fire, Water, Accidents, and Disease.

Losses paid in 30 days after proof of death.

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Agents solicited throughout the Union. Address B. S. WHITNEY, Sec'y., Vincennes, Indiana. my ly

LONG-ISLAND LAND FOR SALE—10,000 acres.—The undersigned is engaged in improving and cultivating the wild lands of Long Island, on the borders of the Long-Island Railroad, about 50 miles from the city of New York, at Lake Road, or Irvington. Several years' experience, and a thorough knowledge of the soil and its capabilities to produce, enable him to say confidently, that these lands are equal to any land on Long Island when cultivated in the same manner. That all kinds of fruit, grain, and vegetables, that are produced on any part of the island, can be raised upon these lands, which are now offered for sale in parcels to suit purchasers and settlers, from small lots of a few acres to 100, 1,000, or even 10,000 acres. To capitalists, or persons desirous to purchase a large tract of valuable land, well situated, of easy access to the best markets in this country, in a perfectly healthy climate, in the midst of a great game region, the woods abounding in deer and wild birds, whilst the neighboring bays and waters of the island are filled with wild fowl and fish in great abundance and variety.

One of the finest trout streams of the island runs through this land, and in the north parts of the tract, is the famous Ronkonkoma Pond, or Lake, one of the most beautiful sheets of water that can be found anywhere, of about three miles in circuit, the shores and banks of which are pleasant and picturesque in a high degree.

Persons settling here, have all the advantages of growth and rise of property of a new country, with all the privileges of an old-settled country, as by a ride of three to five miles, churches and schools of various denominations may be found, of more than 100 years' standing. Title perfect, and will be sold on advantageous terms, and at a low price.

Apply to A. B. ALLEN & Co., 191 Water st., N. Y., DEWEY & WOOD, 82 Nassau st., N. Y., or EDGAR F. PECK, 306 State street, Brooklyn, N. Y.

THE FARMER'S ENCYCLOPEDIA.—By C. W. Johnson. Adapted to the United States, by G. Emerson. Philadelphia, 1850. One large octavo volume, 1,173 pages, with numerous plates, exhibiting Live Stock, Improved implements, etc., etc. This book, which forms a library in itself, contains the latest discoveries and improvements in agriculture, together with information upon all subjects connected with practical farming and rural life.

OPINIONS OF THE PRESS.

"We are fully convinced that such an amount of valuable knowledge for farmers, can be found in no other work in so cheap and convenient a form. In fact, no farmer who pretends to be well informed in his profession, should be without this book."—*New Gennese Farmer.*

"An excellent work, fit to be distributed for premiums by Agricultural Societies. How much better, and in better taste than the amount of its cost in money."—*J. S. Skinner.*

For sale by C. M. Saxton, 123 Fulton st., New York, and the principal booksellers in the United States, elegantly and strongly bound, with gilt emblematical designs, making an ornament to the book case, or parlor table. Price \$4. Cost of the imported copy, without any plates, \$14.

Sept. 31 eom.

ESTATE LAND SALE.—Will be sold on the 14th day of October next, (being Monday of October Superior Court for Perquimans County,) before the Court House door in the town of Hertford, the lands belonging to the late Edmund B. Skinner, deceased, lying on the south-west side of Perquimans River, between that river and Menzies Creek, in the part of the county known as Harvey's Neck. The tract known as the Home Place contains 360 acres more or less, 208 of which are cleared, and in a fine state of cultivation. The fences around and on the plantation are good and in good order. The buildings are many of them, new, and all are in good order. The dwelling house, nearly new, is large and commodious, there are two cisterns, built of brick and cement, with filters. One other tract, known as the Lauston and Parsons land, adjoining the above described tract, contains 687 acres, of which 270 are cleared, and in a fine state of cultivation. Both said tracts are situated on the river.

Terms are one and two years credit, with interest from 1st day of January, 1851. Bonds, with approved security will be required of the purchaser.

Hertford, N. C., July 16, 1850.

E. F. SMITH. C. M. E.

Sept. 24

GREAT SALE OF IMPORTED STOCK,

at Westminster Vt., on the 9th day of Oct. 1850. The Administrators of the estate of the late William Stickney, of Boston, will sell at public auction, on Wednesday, October 9th, at his farm, in Westminster, Vt., the live stock on said farm, being all imported animals, with their descendants. Among which are the following, namely,

SIXTY-THREE DEVON CATTLE.

1. Sixty head of superior Devon Steers and Heifers, from one to three years old. Many of the Steers are well mated and well broken.
2. One Imported Devon Bull, two years old, lately imported.
3. One fine Devon Bull, seven years old, bred by Geo. Patterson, Esq., of Maryland.
4. One yearling Devon Bull, bred on the farm.

SIXTY SUFFOLK, MIDDLESEX AND ESSEX SWINE.

1. Five Imported Boars, of these breeds, one to three years old. Splendid animals.
2. Six or eight Imported Sows. These are, or will be, with pig.
3. About Fifty Swine of these fine breeds unaltered.

THIRTY SOUTHDOWN SHEEP.

1. One lot South Downs, Imported.
2. do. do. Purchased of the Hon. Daniel Webster.
3. do. do. " Col. J. M. Sherwood.
4. do. do. " bred on the farm.

All the animals here offered, were purchased in England, or of the best breeders in this country, without regard to cost, and with great judgment; or were bred with much care on the farm.

Any further information will be cheerfully furnished on application in person or by letter, to WILLIAM S. KING, Woodland Farm, Manton, R. I., or to

o l t ISAAC STICKNEY, Administrator, Boston, Mass.

POSTPONED SALE of Full-bred Shorthorns and Improved Dairy Stock.—Owing to affliction in my family, I have postponed the Annual Sale, which was to take place in October, 1850, until the 28th of June, 1851. I also decline selling any stock by private sale, so as to offer the public, at auction, all the animals I have to part with, without having any previously selected from the herd, and all animals offered will be sold without reserve. My new importations of Shorthorns, Devons, Southdown Sheep, and Hogs will arrive sometime during the fall. Timely catalogues, with full descriptions of each animal, will be published in the principal Agricultural Journals.

L. G. MORRIS.

o l t

Mount Fordham, Sept. 16th, 1850.

NEW HARDY CLIMBER.—The new and beautiful Climber, Calestegia pubescens, recently introduced from China by Mr. Fortune, proves perfectly hardy in New England, having stood in the grounds here the past winter, without the least protection. Trained to a single pillar, say ten feet in height, it is a very striking and beautiful object, from the middle of June to cold weather, during which time it is covered with a profusion of its large double flowers, of a delicate rose color. It is very ornamental, planted in patches, like the verbenas; makes an admirable screen, and is very effective in young plantations, belts, or shrubberies, trailing prettily on the surface, and running up among the lower branches of trees in a very picturesque manner. It is, therefore, particularly suited for ornamenting Cemeteries and Public Gardens. Its culture is very simple, and it thrives in any good garden soil. When required in considerable quantities, it is best to start them under glass in February or March, but the tubers may also be planted in the open ground in May. The subscriber will send to order, by mail or express, October 20th, tubers sufficient for 100 plants at \$5; for 50 plants, \$3; with directions for propagation and culture. Strong plants in pots in April, \$1 per pair.

B. M. WATSON.

Old-Colony Nurseries, Plymouth, Mass., Sept. 1st, 1850. o l t

GREENHOUSE PLANTS, VINES AND
Roses. Parsons & Co. offer for sale every desirable variety of Greenhouse Plants, and many valuable novelties recently introduced from Europe. Attention is particularly directed to their fine stock of Camellia wilderii, the perfection of whose form is not attained by any other variety. The original stock, both of this and C. Abbey Wilder, is in their possession.

Growers of Grapes are invited to examine their Vines, now in full fruit, and from which they can furnish good vines of about forty varieties, at

50 cents for those one year old.

75 " " two years old.

\$1.00 " " of extra size.

Their stock of saleable roses includes some thousands on their own roots of the Remontant, Bourbon, China and Garden Roses, in their various sub-classes. Catalogues furnished gratis on application to Flushing, near N. Y.

PARSONS & Co.

o

CRESSING'S PICTORIAL FIELD BOOK OF

The Revolution, No. 6.—Just published by Harper & Brothers. Price 25 cents per number. For sale by

o l t C. M. SAXTON, 123 Fulton St.

NEW-YORK

AGRICULTURAL WAREHOUSE AND SEED STORE,

A. B. ALLEN & CO. 189 AND 191 WATER STREET, NEW YORK.

THE SUBSCRIBERS keep constantly on hand, and offer for sale the largest and most complete assortment of Agricultural and Horticultural Implements, and Field and Garden Seeds in the United States, among which may be found the following:—

WATER RAMS—of various sizes, for raising water, made entirely of metal.

CIDER MILLS of simple construction, and capable of grinding fine, and in the most rapid manner.

MILL FOR GRINDING BONEDUST.—For sale, a second-hand mill, to be driven by horse, steam or water power.

WINTER WHEAT.—Etrurian, Mediterranean, White Flint, and several other varieties, of the best and most improved kinds of Winter Wheat for sale.

TIMOTHY, fresh reaped, a choice article.

BLUE GRASS, Fresh Kentucky, just received, suitable for lawns, and early and late pastures.

CLOVER, both Red and White, free from all foul seed.

WAGONS.—Single or double of any required shape. Also, Axles and Wheels.

CARTS.—Hand and Ox Carts, and Wheels of different sizes, made of the best material at short notice.

GUANO AND OTHER FERTILISERS, constantly on hand and for sale on reasonable terms.

GUANO—Genuine Peruvian of the best quality.

BONE DUST—of superior quality, in barrels.

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POUDRETTE—at manufacturers' prices.

FOREIGN SEEDS, of superior quality and late importation.

GRASS SEEDS.—Ray Grass, Lucern, and White Dutch Clover Seeds.

GARDEN SEEDS.—A large stock selected with care, expressly for the American Market.

ENDLESS-CHAIN PUMPS of all sizes, to be furnished complete, or in either of their parts, both in large and small quantities.

HIGHLY IMPROVED FORCING PUMP and Garden and Fire Engine, a better and cheaper article than ever before offered in the New-York or any other market, to be sold in any quantity.

NEW AND HIGHLY IMPROVED LACTOMETERS.—We have just got up a new article of cream gauge, far better and more accurate than any heretofore made. Price \$5, with a liberal discount to dealers.

CHEAP SOUTHERN PLOWS.—Nos. 10 $\frac{1}{2}$, 11 $\frac{1}{2}$, 12, 14, 15, and every variety, including several new and highly popular kinds, for sale in large quantities.

ROOT PULLERS.—A useful instrument for drawing out bushes, roots, and small stumps.

VEGETABLE BOILERS, used for boiling food for stock, holding from 15 to 120 gallons.

PREMIUM FANNING MILLS.—These machines considering the simplicity of their construction and efficiency of all their operations are the best in use.

SAUSAGE CUTTERS AND STUFFERS.—These will save nine tenths of the labor in cutting sausage, or other mince meat.

EAGLE PLOWS.—Many plows having been sold under the name of the *Eagle Plow*, which are not genuine, this is to give notice that all plows sold in this city under that name, to ensure confidence, will have our name marked on the beam, and no others purchased here can be relied on as genuine without this brand.

Be particular, also, as to the name, number, and street, which should be

A. B. ALLEN & CO., 189 and 191, Water St., New York.

BRICK MACHINES of the best construction, will make 10,000 to 15,000 bricks per day by hand.

GRANIT MILLS.—Steel and Cast-Iron Mills at \$6 to \$25, and Burr-Stone at \$75 to \$250, for Horse or Steam Power.

PUMPS.—Suction and Forcing Pumps of all sizes with pipe, at lowest manufacturers' prices.

CORN AND COB CRUSHERS of different varieties, efficient and durable both for hand and horse power.

ICE THRESHERS, suitable for large or small Plantations, and adapted to Wheat, Rye, Barley, and Oats.

WHEELBARROWS, Canal and Coal Barrows, of various kinds and sizes.

STRAW CUTTERS of every approved pattern and size, for hay, straw, corn and cane stalks.

CORN SHELLERS.—Several new styles recently made, together with all the old and most popular kinds.

MACHINES for rasping the Mandioca, or Brazilian arrow root; the Curcuma angustifolia, or East India arrow root; the Cycas circinalis; the Zamia pumila of Florida; Maranta arundinacea, or common arrow root plant of the West Indies; and the yuca, or cassava plant of Cuba; potatoes, &c., &c.; from some or all of which sago, arrow root, tapioca, and starch are made.

ALLEN'S IMPROVED PORTABLE RAIL-ROAD Horse Power, Thresher, and Separator.—The advantages of the above horse powers are—1. They occupy but little more space than a horse. 2. They can be moved by the weight of the horse only, by placing the machine at an angle of 10 or 15 degrees. 3. They are easily transported, simply constructed, not liable to get out of order, and move with little friction.

The *Overshot Threshers* consist of a small-spiked cylinder with a concave top, and possess these advantages. 1. They have a level table for feeding, thus enabling the tenders to stand erect, and control the motions of the horse and machine by means of a brake, by which accidents are avoided. 2. In consequence of the spikes lifting the straw and doing the work on the top, stones, blocks, &c., drop at the end of the table, and are not carried between the spikes. 3. The overshot cylinder does not scatter the grain but throws it within three feet of the machine. 4. This arrangement also admits of attaching a *separator* high enough from the floor or ground to allow all the grain to fall through it, while the straw is deposited by itself in the best condition for binding. 5. Neither grain nor straw are broken by this machine. 6. The cylinder is long, which admits of faster and more advantageous feeding; it is smaller and with fewer teeth than ordinary threshers, thus admitting of more rapid motion and faster work with less power; and the diminution of teeth in the cylinder is fully made up by an increased number in the concave top, which is stationary. 7. The separator is a great advantage in diminishing the labor of raking out the straw, as it leaves the grain in the best condition for the fanning mill. Three men with a single power, can thresh 100 to 150 bushels of wheat or rye per day; and four men with a double power, twice that quantity. All the above are compact and can be carried where wanted, complete, or they may be readily taken apart and packed for distant transportation by wagon or otherwise.

Price of single Power,	\$80
" Thresher,	\$28
" Separator and fixtures,	\$7
" Bands for driving, etc.,	\$50 to \$10
" Wood-sawing machine, complete, and in running order,	\$35

Price of Double Power,	\$100
" with Thresher, Separator, &c.,	\$140 to \$150

All the above are sold singly or together, as desired, and are warranted to work well and give satisfaction.

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